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# PEDAGOGICAL SEMINARY.

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## EDITORIAL.

This number of the *Pedagogical Seminary* is chiefly devoted to Child Study. The first article, although primarily a general study of the development of a universal human interest, is based largely on reports concerning children's ideas of the soul and immortality. Dr. Street finds indication from his study that the belief in immortality is not an innate idea, but rather that there is in the child a predisposition upon which with suitable environment this belief may be grafted, and he offers some suggestions upon the perplexing problem of religious pedagogy.

Mr. Croswell whose study of the amusements of two thousand children should be read in connection with the recent studies by Groos (Die Spiele der Thiere and die Spiele der Menschen), by Culin (especially Street Games of Boys in Brooklyn, Journal of American Folklore, July, Sept., 1891), and by Gulick (Pop. Sci. Mo., Oct., 1898; and *Pedagogical Seminary*, Vol. VI, pp. 135–150), finds results that corroborate Dr. Gulick's view that a predominant characteristic of the games of early adolescence is the co-operation of a number to secure a definite end and the delight in contest in contrast with the individualistic amusements of earlier years. He contributes data, also, to the problem of variation in play as conditioned by

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sex, nationality, locality, and season, and makes important pedagogical suggestions. In the survey of Child Study in Europe, Mr. Monroe notes the important foreign, especially the Italian, contributions to the subject, and gives a vivid idea of the extent of the movement. Mr. Wilson's Bibliography of 333 titles is an index of the general activity in this field for the year 1898. In a few cases where important books published previous to 1898 were omitted from the general Bibliography (*Pedagogical Seminary*, Vol. V, pp. 541–589), they are mentioned in the present list.

Dr. Arnold's "Bacteriological Study of School Utensils," which with the book reviews, completes the number, calls attention anew to an important chapter in the modern doctrine of hygiene and cleanliness, and shows the danger that may result from the promiscuous use of pencils, penholders, crayon, and the like.

There are indications that the period of hasty conclusions in Child Study is passing and that the stage of concrete inductive study of definite problems is coming. While in some localities the movement is still in danger from its friends, it is encouraging that it commands the interest and co-operation of men like Clouston, Geddes, Lloyd Morgan, Shuttleworth, Sully, Binet, Mosso, Sergi, Groos, and Trüper. (See pp. 373 seq.) The work already done has opened scores of new problems in the physiology and psychology of development, and the real breadth and significance of the field is appearing. The co-operation of many investigators is needed in studying definite points with large numbers of children, in more extended studies of individuals, in studies of defectives, and of the health of children as affected by the varying conditions of school life, as well as the more directly practical studies for the sake of the teacher.

# A GENETIC STUDY OF IMMORTALITY.

Gone forever! Ever? No—for since our dying race began,
Ever, ever, and forever was the leading light of man.
—*Tennyson.—Locksley Hall. 60 years after.*

Immortality is not a doctrine of the schools, but a faith of humanity, not based upon metaphysic, nor proved by the logic of a given system of thought, but the utterance of an instinct common to the race, which has made itself heard wherever man has advanced from a religion of nature to a religion of Faith. Philosophy, however, has made it one of her tenets, so that God, soul, and immortality become inseparably intertwined, and since the days of Plato, every writer, who has essayed to construct a cosmological theory, has had to deal with these three concepts, either making God the life and source and the final goal of all created existences, or with a blow of thought killing the Deity and hypothesizing all cosmic existence as mechanical; and man as the supreme automaton. Between these two extremes lie numerous diversities of thought.

It is not in the light of philosophy, nor metaphysics, that the problem shall interest us, but from the standpoint of modern science, and especially that of genetic psychology. Since earliest times the mind of man has occupied itself with the immortality of the soul. In regard to this, we can distinguish two movements, one speculative, and one empirical. The first assumes a substrate for the psychical phenomena, and seeks to prove the immortality of the same; in the second, science methods take possession of the psychological investigation, in order to describe the mental phenomena, and lead them back to their simplest forms, and discover their fundamental laws. Psychology and metaphysics have dissolved partnership.

The doctrine of a natural, progressive development is now applied to every problem of life, and it is the purpose of this paper to submit this subject to the same treatment. That faith in a personal consciousness after death has diminished among certain classes of mankind, is evident to even the most casual student of humanity: that it has declined among the great masses, is by no means so certain. Primitive man, childhood, womanhood, and the majority of the thinkers and workers cling as tenaciously as ever to the faith and traditions of the ages. There is, however, a body of thinkers who form the human pseudopodia, as it were, reaching out after and grasping the

new, among whom there are flagellate movements, pendular oscillations, rhythmic flows of thought, while the great body is as calm and steadfast as the deep waters of the mighty seas.

The origin of this state of unrest is not far to seek. It is doubtless largely due to: 1st, that cheap conception of life which a shallow knowledge of scientific thought has produced; 2d, that spirit of personal freedom that vaunts itself in open rebellion against all traditional instruction; that looks upon belief in God, soul, and immortality as a relic of dogmatism and therefore to be distrusted, if not despised; that glows in its own hatred of dogmatism, while its own deductions belong to the same school of thought, only representing the negative; 3rd, that disposition to accept as final the verdict of one department of knowledge without a thorough investigation in the light of all truth; present findings are greedily accepted without any effort to discover their historical settings or prophetic significance; 4th, those mental predispositions that are engendered by long and continued investigation of one field of reality, and especially the materialistic researches of science, which tend to destroy idealistic conceptions; 5th, that wantonness that has followed the emancipation of scientific thought; 6th, that spirit of antagonism that is supposed to exist between metaphysical philosophy and religion, and the modern physical sciences; 7th, the assumption that because certain interpretations of reality have been found untenable, therefore the reality itself must be non-existent.

The intensity and vigor and deep significance of the doctrine of immortality is shown in the vast literature that deals with the subject. Prof. Ezra Abbott published several years ago a bibliography on this theme, which contains no fewer than 4,977 titles. I myself have collected nearly a thousand additional titles and have by no means exhausted the list. Every year witnesses the publication of a score or more of books or pamphlets discussing some phase of the topic, and every eastertide floods the earth with pulpit orations, which the press scatters broadcast. Science has not directly investigated immortality because it lies largely outside of its sphere of activity. Its office is the correlation and codification of experience, and it is helpless without the data which experience furnishes. Immortality lies beyond phenomena, and until science can demonstrate that the mental can subsist apart from the phenomena, or the reverse, that with the disorganization of the organism all mentality ceases, it cannot be said to have given any definite utterance on the question.

As this matter will be more fully discussed later on, no more need be said here. With these preliminary thoughts we may now turn to the close investigation of the subject itself, not

with the hope of definite proof, or disproof, but of more rational and clarified conception of the same.

## CHAPTER I.

### The Genetic Source.

The question of origin of the hope for future life is wrapt in profound mystery. Its genesis long antedates the earliest historic record of man as man. Push the investigation as far back as possible, we find man always and everywhere has had a sense of his immortality. The oldest record, however, is but as yesterday in comparison with the thousands of years man has been an inhabitant of the earth, and if Spencer's dictum, "acquired in the race, inherited in the individual" be true, then this early historic man is physically and psychically the resultant of antecedent forces. The most primitive mind known to-day has long journeyed on the road to civilization. If, however, we are to be governed by empirical facts, we are forced to entirely overlook, or at least foreshorten this unknown, unfathomable past, and accept, as the primitive type, man as he is known to history. With this qualification, then, the statement may be made that a belief in continued personal existence after death seems to be an original endowment of humankind and not any *parvenu*. Stated in philosophic terms this is the old familiar doctrine of "*innate ideas.*" In modern times it finds its justification in the fruits of introspection, which lead the untrained to infer that faiths, for which they can give no adequate genetic analysis, form an inherent factor of the soul itself. Special emphasis is laid upon what has been termed the "religious nature of man," and this has been designated an instinct of the soul. Sense of dependence, sense of oughtness, God, soul itself, and immortality, all find their place here, together with the *a priori* ideas of time, space, and causality (Kant: Critique of Pure Reason), and sense of the infinite (Max Müller: Origin and Growth of Religion), and the theological sense of sin (Kellogg: Genesis and Growth of Religion). These tap roots, around which have gathered all the accretions of the senses, have produced the magnificent growth of modern faith. In justification of this theory its supporters point to the intensely significant fact that man everywhere has faith in continued existence (Dr. Brinton: Myths of the New World), and associate it with some Supreme Being who either conditions it, or acts as an artist in determining the soul's destiny in the land of spirits.

As a theory this will explain as large a body of facts as perhaps any other. It has been successful in maintaining its position in philosophic thoughts, though charged time and again

by the battalions of sensationalism. It is so out of harmony with the lines of development of all the other departments of human experience that one should accept it only as a last resort.

On the basis of this theory one should expect to find the early manifestation of the instincts of God, soul, and immortality. In order to put the matter to a scientific test the following study of children, adults, deaf mutes, and lapsed man, was made, of the first three, empirically, and the last, from literature.

Of the 25 children personally studied, none had any adequate conception of death, still less of the soul and of God. Of course they had been taught most religiously by their parents and sabbath school teachers, but this had failed to impress their young minds other than that "there was a being somewhere whose *name* is God." They said their prayers to papa, or mamma, and had no idea that they formed any relation whatever to such a being. They were fast learning such, but it was wholly an extraneous affair, a matter of the head and not of the deep "inner" nature. Being but eight years of age, perhaps they were too immature to have any due appreciation of a mysterious inner force that was leading them to the realization that they held vital connection with the Godhead, yet one might naturally expect some manifestation of this instinct of the soul did such exist. It is very interesting and suggestive to note that they had no suspicion that their own existence would ever cease. It seems, then, that *man has to learn his mortality rather than his immortality.* This same fact came out clearly with the deaf mutes. With the exception of a few cases where a death had occurred in the home, these children did not have the least inkling of its significance. Their dolls died, as did their toy animals, but this meant little more than sleep to them. Dr. A. C. Ellis and President G. Stanley Hall found that with a somewhat older class of children, that doll-death was chiefly make-believe, as they soon exhumed their buried pet to see whether it had gone to heaven. (*Pedagogical Seminary*, Vol. IV, No. 2.) It is interesting to note that many of these same children fully expected their dolls to go to heaven sawdust and all. In the reminiscences to be introduced later a few report that they used to fancy heaven filled with dolls, and one girl says she had a definite number. All of the 25 children thought that if they were to die they would go to heaven just as they are. It meant no more to them than going to New York would mean to a Boston child.

### Deaf Mutes.

The pathological cases of humanity are shedding a vast flood of light upon mental activity, and it occurred to me, that the

great experiment that nature is carrying on in our midst by depriving some of speech and hearing, might reveal some of the mysteries of soul activity. It was found that Dr. Harvey P. Peet had already, in 1854, done pioneer work, and had executed it so thoroughly that all that had to be done was to discover whether anything new had since been disclosed. The Doctor wished to test the theory of the spontaneous growth of (a) language, and (b) of religious ideas. The method of procedure was the questionnaire method. Certain questions were propounded to the three advanced classes of the New York Institution, and afterwards to thousands of similarly afflicted mortals.

Question I. Had you, before instruction, any idea of a God, or of any being in the sky, more wise and powerful than man? . . . . The answers to this were almost uniform in disavowing any such idea. Two or three specimen replies are: (1) "I knew nothing of God." (2) "Before I was instructed I had no idea of God, but I thought that some one caused the thunder and lightning over the earth, which quaked." (3) I had but an imperfect idea of God originally imprinted on my mind by my mother through signs."

Dr. Peet's conclusion is: "Thousands of deaf mutes in Europe and America have been questioned, and their answers have been perfectly uniform in the point, that no one of them ever originated the idea of a Creator and Governor of the world from his own unaided reflection."

A second question ran: Had you any idea that the world was created? that some wise and powerful being had made plants, animals, men, and all things? This was also answered in the negative, but there were found many replies which showed that the mind was striving after a cosmogony.

Another question asked: Had you any idea of the existence of the soul as something destinct from the body and which might be separated from it? The prevailing answer was "No, Sir! I had no idea of the soul."

Question IV. What were your thoughts and feelings on the subject of death? Did you know that you must yourself die? The replies showed death to be the king of terrors to those mutes who had been brought into contact with it. The great majority never associated it with their own bodies.

Question V. Were you ever led by dreaming of a deceased person to suppose that that person, though dead and buried, still lived? The general reply showed recollection of no such dream.

Other questions were put but they do not directly concern us.

Dr. Peet's general conclusion runs: To the same purport as the foregoing on all the points we have considered, is the

testimony of many other deaf mutes in Europe as in America. Nor have we ever heard of any well authenticated case of a deaf mute, who gained any correct ideas on religious subjects by his own unaided powers of observation and reflection. We feel authorized by the evidence before us to deny that any deaf mute has ever given evidence of having any innate, or self originating ideas of a Supreme Being, to whom love and obedience were one, of a creator, or a superintending providence, of spiritual existences, or of a future state of rewards and punishments.

Thomas H. Gallaudet says: "I do not think it possible to produce the instance of a deaf mute from birth, who, without instruction on the subject from some friend, or at some institution for his benefit, has originated from his own reflections the idea of a creator and moral governor of the world, or who has formed any notions of the immateriality and immortality of his own soul." (22nd Annual Report of the American Asylum.) W. W. Turner, of the American Asylum, and A. B. Hutton, then Principal of the Philadelphia Institution, bear similar testimony. (22nd Report of American Asylum.)

M. Berthier, himself a deaf mute, says: "Without instruction a mute will never have a notion even vague and confused of a superior existence, whom it is his duty to love and obey, and to whom he must give an account of his thought and actions. (Abbé Montaigne. Recherches sur les connaissances intellectuelles des sourds muets considerés par rapport à l'administration des sacrements.)".

Bebian, another Frenchman thoroughly familiar with deaf-mutism, holds the opposite opinion. He says: "The greater number of the deaf and dumb had already before instruction the idea, I will not say of a first cause, a notion too complicated for the feebleness of their intellect, but that of a sovereign being. They all have, if not the idea, at least the sentiment of good and evil." Abbé Montaigne from his study practically agrees with him.

Dr. Howe found that his favorite blind and deaf mute pupil Laura Bridgeman, "alone and unaided, sought God and found him in the Creator." (Dr. Howe's Reports, 1843, 45-50.)

Dr. Joseph A. Seiss (Children of Silence) says, "that persons who have never heard, do not, prior to education, arrive at that degree of mental development and activity, to realize the dawn generation, or entertainment of the transcendent idea of God."

The Americana Encyclopedia adds: "After extensive observation and inquiry we cannot hear of, or find, a single instance in which persons, born deaf and dumb, have conceived of a first cause, from a view of the works of nature without edu-

cation. They describe themselves as looking at those objects like the brute."

In order to discover whether any change of opinion had occurred among the educators of these unfortunates, correspondence was opened with several of the leading institutions of America. The outcome was but to find Dr. Peet's work still unsupplanted.

Miss Mary S. Garrett, principal of the Philadelphia Home for the training in speech of deaf children before they are of school age, says: "I take children between the ages of two and eight years of age and retain them about six years. Although I find it very interesting to have my children tell me about their material life before coming to us, and tell me things that happened to them when they had no knowledge of language, I have not yet had any child tell me of any spiritual experiences." Speaking later, after making special investigation, she adds: "The children do not remember having had any speculations on these points (God, soul, death, life after death, etc.,) or any thoughts thereof." Dr. Gallaudet, President of the Columbia Institution, Washington, D. C., says: "Our oldest professors find that nothing has come to their knowledge of late to change the conclusions reached some time ago, that the congenitally deaf and dumb had no ideas, before instruction, as to a future life." President R. O. Johnson, of the Indiana Institution, caused one of his assistants, Dr. De Motte, to make special investigation of the problem, and the latter replies: "All were early taught these things (matters of my syllabus), but none admit the least degree of self-knowledge on the subject. This result accords with those I have made at other times upon the same and similar topics. I have occasionally found congenitally deaf children, who, on partial and indistinct notions obtained, by pointings up and down and smilings and frownings, had constructed quite curious and interesting theories—if I may use so large a term—of spiritual matters, but they were not original nor natural."

Miss Sylvia Chapin Balis, of the Ontario Institution Belleville, a teacher of many years' experience, bears similar testimony, though she is of the opinion that instances have been met by her in which there were "certain vague and unexpressible ideas of some Supreme Being or natural force in creation." Judging from the content of her letter these clearly come under those last mentioned by Dr. De Motte. She instances the case of Laura Bridgeman as illustrating a *natural growth* into such belief. She finds the experience of Helen Keller has been similar, as also that of Tommy Stringer and Willie Robin, of Jamaica Plains, Mass. Through the kindness of Mr. George Begg and Mr. George H. Putnam, of the Texas Insti-

tution, my syllabus, in a somewhat modified form, was worked through the school. Mr. Putnam gave the matter his personal attention and found "nothing to show that deaf mutes, before instruction begins, have any ideas of God, the soul, or of a future life. All their present ideas of the subject are the result of instruction and not of independent thought." Mr. Putnam added a very suggestive point by saying these children are easily influenced by environment to deep religious feeling, or to atheistic tendencies.

From this extensive study of deaf-mutism, carried on by some of the most experienced teachers and encompassing a period of half a century; it is certainly safe to conclude that as far as they are concerned there is no evidence of a special endowment of the individual with a sense that early and unerringly leads him to a discovery of an inner essence possessing eternal life.

It must be acknowledged that were this the only data, such a conclusion would be at least rash, if not wholly unwarrantable, as in psychic ability the deaf mute is but little above the higher animals, while his acquisitive power is less, as he is deprived of one of the organs of the soul. Aristotle styled the ear the organ of instruction and of intelligence.

## Relapsed Man.

There is another class of matter that may be admitted in evidence here, viz., Relapsed Man. There are a number of well authenticated cases where man has fallen back to the level and life of a wild animal; notably the case of the wild boy of Pindus, described by C. J. Cornish in the last chapter of his "Animals at Work and Play."

By Relapsed Man is meant the man who runs wild after civilization. He loses his manly habits, dispenses with clothing, lives on nuts and roots, sometimes raw flesh, assumes the manner of animal locomotion, mimics the latter in his vocal utterances, etc. He is found in three conditions: 1st. When a child has been carried off and suckled by some animal, as illustrated by those instances when the animal habits are completely assumed, *i. e.*, the child becomes carnivorous, ferocious, and bestial.

The second and more numerous class is composed of those types of individual produced by abandoned or lost children, who maintain their existence by aping the manners and life of the less ferocious animals, and making them their companions. The wild boy of Hanover found in the last century is a good example, as also the boy of Pindus.

The 3rd type, and not an unusual one in the mountainous regions of India and southern Asia, is composed of those in-

dividuals who are carried off by the wolf, children that are suffering from some mental malady, such as hycanthropy.

Col. Sleeman has collected a number of instances of the capture of children from the dens of wolves. The boy of Goomtee, India, forms a fitting example, or the one caught near Hasanpur. It has not been found possible to restore these types to the ways of civilized life. Language is lost, as is also all moral and religious sense. They are completely dehumanized.

## Reminiscences.

As one special effort of this study has been to approach the problem from the practical and psychological, rather than from the metaphysical and speculative point of view, a syllabus was prepared by President G. Stanley Hall and the writer, and issued in order to obtain a free and frank expression of the individual on "the soul" and "immortality." About 500 returns have been received. These have been collated. As the replies have a wider psychological and pedagogical application than to the immediate question of continued existence, a somewhat full notice of them is given, and they are discussed in their general as well as their special bearings.

The first section of the syllabus was:

I. As a child what were your ideas of the soul? Did it have any material principle or bodily form, *i. e.*, of man, bird, or beast? Had it any definite location in the body? If so, where? As you grew older did the soul become to you more and more an immaterial principle or reality? When did this clarification take place? Name definite periods of time, if possible. What were the means by which this was brought about? At your present time of life has the soul any definite form? How does it leave the body? How get to heaven? Does it go alone or have company?

Three hundred and eighty-seven replies (95 males and 292 females, not including the aged people, nor children) were received in answer to this section. They are chiefly from persons ranging from 12 to 26 years of age, though there is a goodly scattering reaching all the way to 65. They are reminiscences, but the greater majority of those replying are still on the declining side of the adolescent curve. In order to make the study include all ages, in addition to the 25 children mentioned above, the writer, assisted by Dr. Colegrove, personally visited 102 adults from 65 to 92 years of age, and held with them an extended confidential communion on their view of immortality, and the effect it has wielded over their life. All conditions of mind are represented, extending from the learned professional type to the ordinary untutored laborer. The written replies are from doctors of philosophy, students of philosophy, psychologists, professional people, normal school teachers and

students, people of every walk of life and from five different nationalities. A very large number of the returns were personal letters.

The data shows the following results. *Form of Soul.* Like the human body, 55 M. 89 F., 144. Like a heart chiefly with wings, 2 M. 52 F. Like a bird, 1 M. 14 F. Indefinite forms, 2 M. 35 F. Beast, 1 M. 1 F. Foot, 1 M. 1 F. Ghost, 3 M. Somewhat spiritual, 12 M. 61 F. About a score had no thought of the soul.[1]

*Location.* In the heart, 35 M. 188 F. In the head, 8 M. 17 F. Whole body (inside skin), 9 M. 24 F. Without the body, 4 M. 10 F. No location, 39 M. 53 F.

A few typical returns are:

M., 19. As a child I thought the soul a kind of second heart with wings, and located in the fleshy heart.

M., 24. As a child I thought the soul an immaterial and invisible part of the body having the body's shape and fitting it exactly.

M., 18. As a child the soul always seemed a misty, foggy body, shaped like a comet, with the tail always pointing upwards. It had its location outside the body.

M., 19. To me the soul was a sort of floating white cloud above the right shoulder.

M., 17. As a child I had no definite idea of the soul, always associated it with the body.

M., 22. I thought the soul a large bubble, which grew as I grew. If it were to get broken I thought I should die. It was situated in the abdomen.

M., 35. When very young it seemed to me that the body went to heaven.

F., 19. I always thought of the soul as something white, shapeless, intangible, more like a white cloud, and located it in the chest.

F., 18. I thought of the soul as a round white spot, about the size of a 25 cent piece, situated beneath the skin on the sole of the foot.

F., 23. I always thought the soul shaped like a heart.

F., 17. I thought the soul a small, white stone, situated in the top of the head.

F., 19. My idea of the soul was that of a tiny, frail, white bird.

F., 17. To my childish mind the soul was a circular place in the heart.

F., 17. I thought of the soul as an egg in the center of the heart.

F., 26. To me the soul always seemed immaterial, but with advancing years this idea became clearer.

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[1] Since this paper was prepared for the press, Dr. G. Stanley Hall's article on "Some Aspects on the Early Sense of Self," has appeared in the *American Journal of Psychology*, Vol. IX, No. 3. In President Hall's returns, there come out many of the childish conceptions of the soul, which material throws much corroborative light on the contents of my own paper. Dr. Hall finds just as many and just as varied forms for the souls as my returns show. Though his paper is chiefly concerned with the larger aspect of self, yet he devotes several pages to an elaboration of the soul aspect, and the treatment is so suggestive and scientific that I can do no better than advise the reader to consult the article in connection with the contents of this paper.

F., 16. As a child I thought the soul the shape of a man with wings.
F., 20. As a child I did not think of the soul as having any shape but rather as a color; different people having a soul white, or black, or of an intermediate gray, according to goodness or badness.
F., 19. As a child I thought the whole body would be taken to heaven in a train.
F., 17. I thought my shadow my soul.
F., 20. When a child I thought the soul a pure white substance which could become soiled by black spots through evil deeds.
F., 17. I thought of the soul as having a head and shoulders like myself and then nothing but a white sheet.
F., 17. My soul was the picture of a beautiful fairy.
F., 18. As a child I thought the soul to be what is now called a ghost.
F., 45. I never thought of the soul as material nor did it have any definite location in the body.

The most striking thing in this part of the study is the psycho-genetic parallelism that exists between the child and the race. The few remains of paleolethie man (Keary: Dawn of History) reveal a belief in the immortal part of man. Megalithic comlechs and dolmens and tombs of the neolithic period show clear evidence that the cave-dweller believed himself composed of more than flesh and blood. The exorcism of the spirit of the dead was effected by placing a layer of sharp stones across the entrance to the burial cave in order that the spirit might be forced thereby to remain in the tomb. (Keary: The Dawn of History.) The Egyptians represented the Ba in the form of a bird, while Horus appears as a sparrow-hawk. (Bastian: Das Thier in seiner mythologische Bedeutung, I. C. S. 161.) The Arabians gave the soul the form of a bird. (Cohen: Zeitschrift-Volker psychologie, 6 Bd. S. 121.) The Celts believed the soul issued from the mouth in a cloud-like shape about the size of a humble bee. (Hugh Miller: Schools and Schoolmasters.) Grimm tells us how King Gunthram's took the form of a snake. (Teutonic Mythology, Vol. III, p. 1082.) The form of a mouse was also common among the Germans. (Schwebel, l. c. S. 10.) Mahomet believed the soul took the form of a serpent and distinguished two classes. (Noldike: Zeitschrift-Volker Psychologie, U. S. W. I.B.) The Finns and Lithuanians called the milky way the "Birds Way." (Kelley: Indo-European Folklore, p. 103.)

Primitive peoples to-day give it various forms. For example the Pawhatas make it a little bird; the Hurons, a dove; the Domingos, a nightingale; the Caribs, a bat; the Burjäts and Mongolians, a bee; the Niaser, a spider; the Kaffirs, a fish. Among lower animal forms, the prevailing one is that of a bird. The nature depending entirely upon the region. This is perhaps psychologically to be explained by the influences of dream experience, *i. e.*, the rapidity of passing from place to place in the dream-life. Serpents also play a very important rôle in

primitive psychology. Among all primitive people, however, the prevailing form was that of a human figure. (Jacob Robinsohn: Du Psychologie der Naturvölker. Chap. 3.)

This close correspondence of the individual with the race is also seen in the localization of the soul. Early man placed it chiefly in the blood, heart, or breath, though a few made it synonymous with body-warmth, and hence located it throughout the body. Plurality of souls is an idea common to the child and the race. Many children have a good and a bad soul. (President G. Stanley Hall's Lectures.) The Egyptians, Hebrews, Persians, Chinese, Greeks, and Romans, Indian tribes of America, all had more than one soul. Plato gave man three, Aristotle, five. Mr. R. A. Oakes has fully developed this early conception. (Pop. Sci. Mo., Vol. 34.)

*Religiously* these replies exhibit no definite conceptions. The soul to most of them is materialistic. It exists not as a deep, inner consciousness, but as all nature exists, *i. e.*, objectively. It is phenomenon rather than nowmenon, and it is very clear that without the endeavors of each generation to pass on the traditions of the elders such thoughts would never rise in the child mind.

*Psychologically*, is the child really an epitome of the race, and must he repeat its stages psychical as well as physical? Is there anything in the recapitulation theory, or is all this close correspondence a mere coincidence? It has been fairly well established that in his body the child bears numerous vestigeal remains (Wiedersheim: The Structure of Man). May he not also have rudimentary organs of the soul? President G. Stanley Hall's article on Fears (*American Journal of Psychology*, Vol. VIII, No. 2), goes to answer in the affirmative, as does also Dr. Geo. E. Dawson's work (Psychic Rudiments and Morality, unpublished). The materialist would go a step farther and ask, is not the soul itself a vestigeal remains? Is there any such thing? Is it not a mere mythopoeïc creation?

*Pedagogically*, should the child be encouraged to believe in and objectify the soul, or should all diligence be taken to guard his impotent mind against such childish imaginations?

Before discussing more fully any of these lines of thought, some other matter must be presented. From the replies to the question seeking information concerning a clarification, the following interesting and suggestive table was obtained. A furtive glance reveals the parallelism between the psychic and physical development, and shows the period of puberty to be the dawn of the full religious consciousness. This result accords fully with a former study made by the writer (*Pedagogical Seminary*, Vol. V, No. 1,) and finds itself in full agreement with the studies of Drs. Lancaster and Starbuck (Lancaster: A Study of Ado-

lescence. *Pedagogical Seminary*, Vol. V, No. 3.) (Starbuck: *American Journal of Psychology*, Vol. VIII, No. 2.) The girls are found to precede the boys by about 2 years, which is also in accordance with child study results hitherto obtained. (F. Burk: A Study of Growth. *American Journal of Psychology*, Vol. IV, No. 3.)

Clarification Period.

| Age. | Sex and No. |
|---|---|
| 8 | M. 0 — F. 3 |
| 9 | M. 0 — F. 5 |
| 10 | M. 3 — F. 21 |
| 11 | M. 3 — F. 11 |
| 12 | M. 3 — F. 36 |
| 13 | M. 2 — F. 23 |
| 14 | M. 20 — F. 77 |
| 15 | M. 35 — F. 8 |
| 16 | M. 11 — F. 16 |
| 17 | M. 1 — F. 7 |
| 18 | M. 1 — F. 4 |
| Gradual Growth, | M. 10 — F. 50 |
| No. Clarification, | M. 7 — F. 30 |
| No. Soul, | M. 1 — F. 1 N B |
| | 95 292 |

A comparison of the sexes may be obtained by multiplying males by three.

| Comp. Table of Sexes. | |
|---|---|
| M. 0 | F. 3 |
| M. 0 | F. 5 |
| M. 9 | F. 21 |
| M. 9 | F. 11 |
| M. 9 | F. 36 |
| M. 6 | F. 23 |
| M. 60 | F. 77 |
| M. 105 | F. 8 |
| M. 33 | F. 16 |
| M. 3 | F. 7 |
| M. 3 | F. 4 |
| M. 30 | F. 50 |
| M. 21 | F. 30 |

The rise at the age of 10 is due to parental, or other influences. Most of the females reporting this age carefully state that lucid explanation of the concept soul was given them at that time by parents. At 12 the girls are brought into contact with physiology, which send them in search of the soul. No reason is assigned for the marked rise of self-consciousness at 14 and 15. A few of this period speak of religious experiences, but most represent themselves as merely waking up to the fact that they had a soul. Possibly it was simply the result of a perfected mental organization which enabled them to intelligently comprehend the instruction of former years and to perceive the same in its deeper, fuller significance. More probably it was due to the psycho-physiological changes peculiar to pubertal life. (Starbuck: *Journal of Psychology*, Vol. IX, No. 3.)

The curve again rises at 16 through the influence of psychological study.

The chief agents in this clarification were: Talks with parents, teachers, friends, and reading. A few mention conversion and confirmation.

Very suggestive pedagogically is the fact that 60 experienced no marked change, but had a gradual growth, and that 37 are still entrammeled by their childish vagaries. It doubtless would be found, on closer examination, that all those who had the concept in the form of the human body still retain this mental imagery. Anthropomorphism is characteristic of humanity.

What is needed in religious instruction is not the supplanting of such conception, but the weeding out of all those idiotic abnormalities that the childish imagination will build up if no better direction be given to the channels of its activity.

To the speculative question of how the soul gets to heaven: 30 M., 149 F., would have it accompanied by angelic attendants or by loved ones; a few think Christ personally accompanies the soul. 6 M., 63 F., imagine it as going alone. 5 M., 13 F., think it is in heaven now. 67 F. have no idea. 1 M. has no heaven. 42 did not reply. Before drawing any general conclusion I wish to add the material collected under two other Rubrics.

HEAVEN.

II. As a child what were your ideas of heaven? Did it have a definite location? If so, where? Was it like a city or great palace or what? What and whom did you seem to see there in your moments of reverie? Did you long to go there or prefer life on earth? Has any experience in life made heaven nearer and dearer? As you grew older did your views of heaven change? Can you state the period of change, and the motive for the change? Do bodily feelings, such as fatigue, joy, depression, failures in life's work, etc., ever influence your views of the after life? Describe fully. How do you conceive heaven and life after death now?

Replies were received from 97 males, and 325 females.

Speaking of location, 81 males and 320 females placed it above the clouds. Most made the sky its floor, and looked upon the stars as holes caused by angels' heels. Study of astronomy rudely shook the faith of many of those reporting, as they could find no place for a definite location of their materialized realm of delight.

Why the human race should have placed its elysium above is an interesting problem, and possibly finds its solution in primitive nature worship. Max Müller, and those who maintain that man is endowed with a sense of the infinite, would probably make Nature only the stimulus to call forth this feeling of oneness with the All-power, and would find on the boundless expanse above, the best expression of the greatness and domain of God. To those replying, it is the product not of spontaneity but of environmental instruction. 2 M. and 2 F. placed heaven beneath the earth. This was an inference drawn from burial. 2 F. placed it beyond the horizon, thus thinking of it as another country. President Hall writes of the Boston children: "Many children locate all that is good and imperfectly known in the country, and nearly a dozen volunteered the statement that good people when they die go to the country—even here from Boston." Sully also finds that very young metaphysicians "place their heaven in the country, the unknown beautiful region where all sorts of luxuries grow."

(Studies of Childhood, p. 122.) Earl Barnes (Theological Life of a California Child, *Pedagogical Seminary*, Vol. II, No. 3,) also found several children locating heaven on earth, though the greater number placed it in the sky. Very few would have their future domain in the stars. The favorite form of heaven is a city; 54 M. and 154 F. speak of it as such. 14 M. 69 F. compare it to a country. Here also belong: open space, 8 M. 26 F.; an avenue, 3 F.; park, 4 M. 2 F.; great garden, 4 M. 12 F.; forest, 2 F.; and Indian happy hunting ground, 1 M.; 22 M. and 35 F. thought of it as a gorgeous palace studded with rooms and glittering with ornaments of gold and jewels and precious stones; 8 females considered it one great room occupying the whole of the sky; 1 F. a collection of connected buildings; 1 F. a church; 1 M. a cabin; 2 M. and 7 F. gave virtually the apocalyptic scene; 11 F. saw heaven in the clouds.

The 25 children studied think heaven an exact copy of their home and its environments. Sully and Barnes both find this same diversity in the child's conception of heaven. Barnes says: "Heaven is generally, even with children up to 12 years of age and beyond, an improved earth." In my studies there is nothing to definitely guide in determining an age period, so none has been attempted.

The psychological explanation of this mundane portrayal of the celestial home is two-fold. 1st. The child up to about the time of puberty is in what might be called the realistic stage; the allegorical period lies on beyond. 2nd. All our songs and descriptive phrases are such as would build up in the fertile imagination of childhood most real scenes. Several of those reporting speak of the Gates Ajar, Stepping Heavenward, Within the Pearly Gates, Romance of two Worlds, The Little Pilgrim, Pilgrim's Progress, and the scenes in Revelation, as giving them their imagery. Songs, such as: Child of a King, There is a Happy Land, "I will Sing you a Song," "Sweet By and By," etc., are freely mentioned.

If the deduction be legitimate that children are close disciples of Berkeley up to the time of pubertal activity, then all our methods of religious instruction are radically at fault. Instead of aiding the child to clear, well-defined, legitimate ideas, we present to him a crazy patchwork of instruction, in which the abstract is largely present, and leave him to the mercy of his own fantasy. How bizarre their ideas are is clearly shown by the work of Mr. Sully, Mr. Barnes, and the Worcester collections of thoughts and reasonings of children.

As a Sabbath School worker I may be permitted to turn critic. If so, I should say that the great defect lies in the fact, that Sabbath School workers have (1) no knowledge of child life

other than their own reminiscences which they too often fail to utilize; (2) Have no philosophy of religious pedagogy, *i. e.*, they "begin nowhere and end nowhere." I do not mean to say that good, faithful work is not being done in endeavoring to lead the children to a personal knowledge of the Christian experience. That is only one side of the problem. There is the task of leading the children into a grand, deep, soul-enriching, life-energizing conception of spirituality that need never be shocked, nor alas in too many cases, be overthrown by contact with the wider and materialistic teachings of science and life.

Such crude conceptions of the soul, and the following of heaven, certainly cannot afford much material for soul growth. The things reported as seen in heaven are: Angels, beautiful birds, gardens with trees — silver lakes, children, people playing on instruments, God's throne, bright happy people, dead friends, palaces, houses, God, Christ, Holy Ghost, apostles, saints, martyrs, biblical characters, white mansions, thrones, golden streets, golden walls, people sitting in rows, flowers and fruits, delicious breezes, flowing rivers, mossy banks, hills and woods, green grasses and brooks, people in white, hundreds of dolls, golden gates, thorny paths, palms and green plants, fountains, music, a great book, jewels, two guardian angels at the gate, sheep pasturing, broad fields, golden harps, crowns, high walls of pearl and jasper, precious stones, white doves, all kinds of flowers, watermelons, pecans, candy and cake, bananas, cocoanuts, etc., etc. All these things appeal to the sensuous side of life, possibly to the æsthetic sentiment, certainly not to the spiritual.

How the solution is to be reached is baffling. Two or three principles may help. The child must be made the center of instruction and all teaching must be adapted to the stages of development and in such a manner that each growth will absorb the rudimentary organs of the periods. (2) Nothing should be taught as TRUTH which will have to be unlearned at some future time. (3) The soul is also subject to the laws of growth, and must not be treated as a reservoir into which may be dumped the metaphysical absurdities of adults. (4) If the early years are times of realism, then the purest kind of realistic (objective) instruction must be employed. The Pestalozzi of religious instruction has still to come. The question is a vital one in this age of doubt and unrest. I raise it with the hope that some solution may yet come. It does not seem to me that the complete separation of religious truth and scientific truth is desirable. There ought to be no conflict between them, and he who sees in broad perspective will find none. Of course the dogmas of science and those of religion may always be at variance, but dogma is not necessarily truth.

The old people studied all looked upon heaven as a grand country home. The question of *rest* did not play a large part in the drama of their imagining. Activity seemed to be the desired haven.

Among those reporting: 20 M. 45 F. desired to go to heaven, while 69 M. and 192 F. preferred life on earth. Many of these latter looked longingly upon the delightsome land, but death and the grave stood as a barrier between.

Sixteen M. and 60 F. testify to a progressive change of heaven's imagery, specifying it as a growth towards the conception of God as spirit, and heaven as a spiritual community. 50 M. and 171 F. reply that they still conceive of heaven in the terms of their childhood, though of course its significance has been broadened and deepened.

Bodily feelings are not so potent a factor, as many have supposed, in keeping alive the human interest in a future existence. 40 M. and 103 F. find themselves indifferent as to emotional influences. 18 M. and 26 F. declare their moods of joy only intensify the anticipatory delights, while moods of depression suggest the thought that it will be all right by and by. 8 M. and 11 F. speak of joy as strengthening their hope while despondency and disappointment destroy all regard for continued existence.

These figures are small, but so far as they go they fly in the face of the psychologic theory advanced by Runze (Psychologie des Unsterblichkeitsglauben, p. 31 ff.), that heaven is a mere creation to satisfy the injured feelings. Very few indeed looked upon heaven as a place of reward, but regarded it as a sphere for continued future usefulness. As this part of the questionnaire is not reminiscent, but present personal testimony, this becomes all the more cogent.

The causes assigned for the change of conception of heaven are: Death of loved ones, 44 M. 174 F. Conversion or deepened Christian experience, 15 M. 41 F. Clearer instruction, 5 M. 26 F. Sickness, 1 F. More than half of those replying (not including the children nor the aged) speak of death as the one agent that binds their hopes to a heaven. This sounds very much as though Prof. James was right when he said in effect that our desire for heaven and immortality is the longing of our bowels for our loved ones. Runze also emphasizes the great office death has in perpetuating the religious sentiment.

It is interesting to note the replies to the empirical question: "How do you conceive heaven and life after death now?" 16 M. 83 F. reply, a place of praise and happiness. 34 M. 24 F., a place of activity. 22 M. 30 F., a place of development. 6 M. and 40 F., a place of reunion. 4 M. 25 F., a place of

rest. 8 M. 12 F., a state rather than a place. 12 M. 12 F., a place of reward. 4 M. 7 F., a continuation of life. No conception, M. 18, F. 34. No heaven, 1 M. 1 F. A few condensations.

F., 20. Heaven was up above the stars, was like a city, every family had a house. I seemed to see God and angels and mother. Death of friends has made heaven nearer. My conception of heaven has changed but slightly. Bodily feelings have but little influence, though joy intensifies my conception of the happiness to come, while fatigue, depression, etc., may make heaven desired.

F., 19. I think of the white throne in connection with heaven.

F., 17. I used to think at sunset that the beautiful red and yellow flowers were a little bit of heaven.

F., 27. I have no idea of heaven other than that given in the Bible.

F., 17. I always thought of heaven as being similar to our life here, only everything was so much nicer.

F., 18. I thought good animals went to heaven too.

F., 18. To me heaven was located below the earth. When a small child, I would wander to the cemetery and peep into all the holes and look around the headstones to see if I could find any road which led to heaven.

F., 18. I now think of heaven as a place where all shall be united and live in happy friendship.

F., 19. I used to think heaven a place where every little boy and girl did as they wished and had all the candy and toys they wanted. Later I thought heaven a large country place with green fields and flowers. I saw children with their parents. When a friend dies heaven becomes dearer. I cannot express my present conception.

F., 17. I think of heaven now as a refuge from life's cares, when life's work is done.

F., 23. Heaven was to my childish fancy a great avenue paved with gold, with rows of tiers and tiers of seats on each side on which the people sat. I used to fancy at times that when I died I would be born again, perhaps as a colored child or Irish washerwoman. This idea caused me much misery.

F., 16. I thought of heaven as pictured in Revelation. My views have been greatly influenced by reading Miss E. S. Phelps's "Gates Ajar."

F., 17. I did not long to go to heaven, as I wondered what the people could find to do there, and so thought it was rather tiresome. To me now heaven is a state rather than a place.

F., 17. To me heaven consisted of two distant buildings infinitely large. Between them stood the throne where God sat with a book of our life's work.

F., 23. Heaven was to me a city located in the sky. Its streets were wide and pavement shining. There were houses with glittering domes and spires. The entrance was through a gate, and just beyond this was a beautiful park where children played, birds sang, and flowers abounded. I saw the Saviour standing near the gate. God was on his throne, near which was a great book. Angels were ministering and friends were happy. I saw my loved lost ones. I preferred life on earth with parents. When 14, the book, "Stepping Heavenward," impressed me very much. Death of a brother has made heaven dearer. As I grow older my views of heaven do not change. Bodily feelings do not exert much influence either way. I still think of heaven as a beautiful place where there is perfect happiness.

M., 18. My idea of heaven was a city with magnificent temples.

M., 22. I did not think of heaven other than an immense throng of people with God as the central figure. I desired to go there. Death has made heaven nearer. Later my views have become more vague. I still think of it as a place where the pure in heart shall live forever.

M., 21. Heaven seemed like a beautiful garden with wondrous trees. Therein was a stream and a silver lake. Children played on the shore.

M., 35. My hope is that heaven is such a place, and such a circumstance, and such company that the mind may go on developing eternally.

M., 26. Says as he grew older he wanted to think of heaven as a regular "Indian's Happy Hunting Ground."

A careful study of the replies to this section reveals the following facts. Boys much more frequently than girls experience a doubt period. This is probably one element of the psychic correlate to the physical variability of the male. Throughout the biological series the female is the stable preservative element, while the male tends to break away from the conservatism of its race. (See H. Ellis: Man and Woman.)

2nd. The male looks upon heaven as a place of activity, further development, a continuation of life's features, a place of reward, a state rather than a place. The female views heaven more concretely, thinks of it as a place of praise and happiness and rest; a place of reunion, a happy home. The differentiation of these views are evidently largely the product of environmental influences.

3rd. Youth fancies heaven a place of continued endeavor and activity; old age a place of rest, a hiding place from the burdens of life; philosophy, as a state of growth in knowledge.

4th. The judgment throne and the book form a very prominent part of the mental imagery of nine-tenths of those reporting; one can easily fancy what must be the ethical consequent of such an ideal. It may be, as Shelley has said of the hereafter: "a whip to keep a coward to his work." It is not so to the obedient spirit. Its theological import must be intense.

5th. The question of rewards takes a very low position among the influences that go to motivate the celestial hopes. Constantly does one meet the aspiration to live a life worthy of continuance, rather than the desire for a heaven to satisfy the injured feeling. One must not draw too wide an inference from this fact, as the vast majority of those reporting are in the period of ambitious and altruistic endeavor, 30 or 40 years hard and bitter conflict with the oppressive and discouraging difficulties of life may modify even heaven's aspect.

6th. The thought of heaven, and especially the thought of loved ones waiting and watching acts mightily upon the adolescent heart, leading it to form lofty resolves and aiding it to

carry them to fruition, and comforting it in times of peril and failure.

7th. The chief characteristic of the replies from the philosophic student and from the older people was the more definite spiritualistic and idealistic conception. Most of them had ceased to view heaven as a place and looked upon it as a mode of being, a changed condition, in which progress and freedom is the law. All, save one, adhered to some kind of existence corresponding to heaven.

8th. Death visions of dying friends have been interpreted as an encouraging message from the land beyond.

9th. Here again is met the close parallelism existing between the child and the race. The Egyptian state of the dead was not a passive condition of bliss, nor one of endless joy. He retained his earthly personality, employed his energies in a manner similar to what he had done on earth. In the Aalû fields they ploughed the soil, and seeded the ground, and gathered the fruits thereof, and trod out the grain with the ox, the same as in the fertile Nile valley. The Vedic worshipper looked upon death with no terror. To him there was somewhere a region where the gods dwelt; where the children of men were assembled anew under the scepter of him, who was the first progenitor of their race—the divine Yama. They had no idea of retribution. The after life was but a prolongation of the old life under changed conditions.

Nothing could be more real than the "Hindoo Paradise of the West." Its grandeur is surpassed only by the vision of the lonely inhabitant of the Isle of Patmos. The allurement of Nirvâna is possible to only a few of the elite of life. For the common people there is a series of heavens proportionate to merit, where beautiful scenery, pleasant society, good cooks and pretty women, make as material and attractive a paradise, as that desired by Mahomet. (L. Griffin: Fort. R., Vol. LIV, also Eitels 3rd Lecture.)

The eschatology of the Avesta resembles somewhat that of the Christian. (Dr. Griger: Civilization of the Eastern Iranians in Ancient Times.)

Islam has an enchanting Elysium situated in a noble garden of streams, and fruits, and flowers. There the inhabitants surrounded by beautiful, dark-eyed maidens (Houri), drink costly wine, and enjoy unending bliss, clothed in green garments of brocade and damask and adorned with silver amulets. (Krenver Du herrschenden Idean des Islams. S. 76.)

Among the Chinese, as also among all primitive peoples everywhere, the grave has been the abode of the spirit. The Slavonic had a shadowy land of the underworld and a "Happy Eastern Isle." The Teutons also held the grave to be the

domain of the spirit, though many believed in the Kingdom of Hela. Scandinavia's Valhalla was a veritable battlefield on whose confines was situate a huge tavern where Odin held sway. (Eddas.)

The Hebrew Sheol, the Greek and Roman Hades were material. Etruscan tombs reveal the soul in sensuous delights, and every Western tribe has its happy hunting ground.

The psychic similarity does not necessarily justify the recapitulation theory, but simply substantiates the doctrine that mind is mind the world over and will react in similar ways to similar problems.

### Immortality.

III. Has your belief in immortality been an unfoldment of your nature, or is it the result of parental influences, scriptural teaching, observation of natural phenomena, loss of friends in death or your own inability to conceive your existence as coming to an end? How has the belief been strengthened or weakened as you grew older? Was there any particular period in your life when you felt yourself immortal? If you are now aged how do you view the teaching? Is your faith therein ever influenced by elation or depression, success or failure, etc.?

This and the remaining sections are fullest in replies. 409 females and 116 males send written returns. These with the children and aged people make a reporting body of 652.

The aim of this section was to discover as far as possible how far the immortality sentiment is the consequent of natural, normal development of human nature, and how far it is the product of instruction. The following figures and condensations will show what success has attended this effort. 27 M. 95 F. cannot remember the time when they did not believe in immortality, consequently attribute the faith to an unfoldment of their nature; 86 M. 253 F. think it the product of parental influence; 88 M. 309 F. attribute their belief to scriptural teaching; 14 M. 101 F. speak of loss of friends in death; 17 M. 52 F. of observation of natural phenomena; 21 M. 85 F. of their inability to conceive of their existence coming to an end, and 1 M. 2 F. of evolution.

It is impossible to tease out these genetic fibres so as to disclose the true inceptive element. Several of those answering ran the whole gamut. It is probably safe to say that they all have been factors in progressive development, but the main source is to be found in parental or other influence. The figures show this. There were, however, clear instances of entire absence of parental teachings. The social *milieu* is such that it becomes impossible to imagine, devoid of scriptural influence, a community in which any of those replying may have lived. So far as these papers go, then, this whole faith may be nothing

but the product of instruction, the same as any other abstract principle.

Typical answers are :

F., 17. As a child the thought never entered my mind of there being no existence after death. Even the birds, and animals and plants seemed to go on living in some way.

F., 26. I think my belief in immortality the result of parental influence, scriptural teachings, and my observations of natural phenomena. The loss of friends in death has tended to strengthen the belief.

F., 26. Disbelief in immortality resulted from loss by death; belief in immortality came from careful reading and study of the subject. Belief has been strengthened as I grew older by increased interest and thought.

F., 19. I cannot account for my belief in immortality. I only know that I always believed in it from my earliest recollections.

F., 21. I think that my belief in immortality has been an unfolding of my nature, as I have taken particular pains to reason it all out by myself.

F., 18. My belief in immortality is the result of my mother's teaching, and what I learned in Sunday School and Church. I believe in the Bible and therefore I believe this doctrine true.

F., 21. I have always believed the soul exists after death. I have been so taught and unquestioningly believed. I sometimes feel the spiritual influence of lost loved ones all about me. Life to me is so wonderful that I cannot conceive of its finality.

M., 25. Belief in immortality is the result of parental influence and scriptual teaching, and was strengthened by the death of my mother ('96), who, after having lost consciousness of all those around her, raised her head and said, "Mother," "Sister," and they had been dead for a number of years.

M., 21. My belief in immortality has grown stronger. I cannot conceive of people having the same end as animals. My belief has been strengthened by lectures and reading, yet there is a something that tells me and convinces without proof that I am immortal.

F., 19. It is impossible for me to have any conception of immortality because in our home, I was never taught such a doctrine. We have no religious views in our family, therefore the soul to me does not exist.

F., 19. I don't think there was any period in my life when I did *not feel* myself immortal. My faith is not influenced by elation or depression. Religion would be of no value to me without this hope.

These last two are introduced to illustrate an antithesis that is more or less pronounced in life.

79 M. 304 F. find the belief growing stronger, and assign the motive to death of friends, reading, observation of nature, Christian experience, deeper knowledge of biblical truth; 6 M. 8 F. find the belief weakening with advancing years; 1 M. 15 F. do not know whether it has strengthened or weakened.

The question which sought for a definite period when the sense of immortality was particularly strong, entirely miscarried, as the greater number interpreted it as asking whether they ever felt that they, Elijah like, would not die. 72 cases, however, are reported. The testimony is conflicting; about half

say "There has never been a period in my life when I felt myself immortal." The other half replied in the affirmative and specified definite time, such as at conversion, when twelve, at the time of mother's death, now, etc.

The testimony on the influence of elation and depression corroborates that given under the section on heaven. Emotions seem to work both ways. A girl 17, says: "When joyous, heaven and future life vanishes from my mental horizon; when sad or depressed, I long for a future rest." While another, F., 26, says: "Faith in immortality is *increased* by elation and success, decreased by depression, failure, etc." It would be vain to deny that the hues of a coming glorious existence do not receive their tints from the emotional states, but it is possibly unjust to go so far as Dr. Mitchell has and assert that triumphant death is dependent upon the location of disease. He remarked that he had never seen a triumphant death in a person diseased below the diaphragm. This may be true and yet not argue against the general testimony of many witnesses, as there is clearly a physiological reason.

The girls, as the returns show, are much more emotional than boys.

There is still another class of data, viz., the testimony of the 102 aged people. These were visited in their homes and represent a great variety of creed, extending from the extreme theist to the out and out atheist. In age they ranged: 24 from 60 to 70; 56 from 70 to 80; 22 from 80 to 92. Of these, 1, M., 66 years of age, does not believe in immortality. As a child he doubted the existence of God and the authority of the scriptures and has been an atheist all his life. 3 M. and 1 F. have found the belief weakened with increasing years. The chief causes assigned for such: The "inconsistent lives of professing Christians." "Not finding people square in business." "Life of every day associates," and "church lawsuits." What these could have to do with a rational determination of a man's faith is difficult to comprehend. It is worthy of note that in all these cases the decline of faith was due to extraneous circumstances and not to the unreasonableness of the doctrine. These four are types of a large majority of unbelievers, *i. e.*, some personal rather than logical motive has warped their nature and with it their intellect and emotions. The remaining 97 find their faith strengthening daily. The source of their confidence is their own inner nature, a sort of Socratic demon that was a constant admonisher. They all finally fell back upon the scriptures and trace the origin of the belief to the moral atmosphere of their childhood. A few of them, and particularly my atheistic friend, have reached through ratioci-

nation a faith in continued existence. With all it is personal but varied in its nature.

There is possibly another element of human experience that might be introduced to throw at least a side light upon the question, namely, the personal consciousness of the existence of a Divine Being. No endeavor was made in the questionnaire to gain any information, but it is a well known tenet of the Christian, Semitic, and Islamic faiths, and the highest endeavor of these is to bring the individual into this conscious personal relation. Such a relation, it is claimed, leaves no doubt to man of his immortality, because he partakes of the nature of the divine.

Very appropriate here is the recent (Jan. 6th Christian World) utterance of the greatest student of religions outside of the pale of the priestly office, Max Müller. He sums up his creed in these words: "I believe in one revelation only—the revelation within us, which is much better than any revelations which come from without. That inward voice never allowed me the slightest doubt or misgiving about the reality of a future life. If there is continuity in the world everywhere, why should there be a wrench and annihilation only within us?"

At this period a pause may be made and soundings taken in order to determine our moorings.

In the study of the congenital mute nothing has been found which would indicate the existence of a special religious faculty whose absolute function is to lead its possessor to a knowledge and certainty of immortal existence. In relapsed man the evidence is clear that such inherent powers do not exist, as all future endeavor to give him any conception of God, soul, and heaven, have been completely futile.

In the child there is no evidence other than that its intellectual and emotional life is the product of hereditary (biological) and environmental discipline.

The aged are unanimous in attributing the peace and assurance of an endless life to a double revelation, one in their own heart and one in the holy life and thoughts of others and in the teachings of scripture.

All this seems to indicate not a body of innate ideas, asserting themselves infallibly, but a prepotency or disposition on which may be grafted this branch of truth. What these prepotencies are, or whence they came, can no more be determined empirically than the origin of instinct. Theories there are, but the everlasting *why* still remains unanswered. Something there is in human nature that readily and eagerly responds to such instruction. In man to-day this something is not so difficult of explanation, but in primeval man it lies hidden in profound mystery. In the following chapter an attempt will be

made to analyze the belief into its elements and thereby discover some of the factors that have entered into the composition of the same.

## CHAPTER II.

### A. Biological Considerations.

In the animal world there is nothing that indicates the presence of ideals. Intelligence there is in the realm of sense experience, as may be seen in the constant intelligent adaptation of animal activity, but with Lloyd Morgan (Comparative Psychology, p. 358), we must believe this to be the product of sensuous association, and not of spontaneous reasoning on the part of the animal. Emotional life there is, but not such as is born of a keen appreciation of relations and conceptions. Æsthetic judgments they possess, but no ideals. They may exhibit evidences which, in man, would prove the presence of conscience, a moral sense, but here, too, they are devoid of any standard of truth other than that born of sense experience. Being devoid of the ideal he becomes the plaything of environment, while man, in the struggle for the attainment of his ideals as things worthy of desire, rises above the sensuous and makes his environment the agent of his progress. Whatever difference may exist between man and the lower animals, there will be found in the sense experience of animals the raw materials out of which much of the higher life of man has been evolved.

Speaking on this point Morgan says (p. 375): "We have impressions and the transitions between them, which need only the faculty of perception, together with the generalizing and analytic power of conceptual thought to quicken them into knowledge. We have emotional states, which, when standardized in reflection, may be sublimated to ideals, and we have a native practical energy which needs only a new application in the *will* to attain knowledge and realize the ideals, and when man became man, and began to utilize his newly acquired powers, he did not leave behind him for good and all the life of sense-experience. . . . . He has not left behind him the emotions of his animal nature, he has idealized and purified them.

Nothing can be found in the animal life that would approach any resemblance of consciousness of continued existence, nor is there any authority for saying that he prefigures death. To expect such would be to expect gold from tinsel or virtue from the vicious, but there may be found in the animal series that which in man has ripened into the consciousness of continued personal existence.

It would be a *petitio principii* to assume with Professor Cope, that there have been at least three elemental factors at work in evolution, viz., matter, force, and consciousness (Origin of the Fittest, p. 230), by which term he means physical sensibility, the earliest manifestation of mind, but I do not see how there can be a satisfactory hypothesis for evolution without such assumption, and it further seems to me the empirical facts gathered by Darwin, Spencer and other workers do not violate such hypothesis. Prof. Cope refuses to subscribe to the theory that consciousness in this sense is the product of force. He rather thinks it a force itself, for he says "the nature of consciousness is such as to distinguish it from all other thinkable things, and it must be ranged with matter and force as the third element of the universe." He refuses to accept evolution as the dead mechanical thing many writers would make it, and while he admits the play of natural selection, sexual selection, survival of the fittest, and all the other agencies so earnestly invoked, he makes the center and crown of them all "mental selection," or the willing response to pleasure and pain stimulis, which leads an organism to choose an environment best adapted to its physical well being.

This seems to me to be the most intelligible and probable evolutionary hypothesis, and one largely borne out by the facts. It certainly is not fraught with all the vitiating influences that attend the mechanical view. It is free from deterministic fatalism and does no violence to the moral interpretation of the universe, does not offend the deep sense of justice, and requires no serious modification of existing ideas on the great questions of right and wrong.

The vital question for us is, whence came this third element? Sir William Thompson does not hesitate to declare life an exotic to our planet (Cope, p. 442). Cope, too, bursts the narrow confines of this earthly planet and makes consciousness (life) peculiar to the universe. He finds no difficulty in peopling the circling worlds, as life builds for itself its own body suitable to its environing conditions. Prof. Le Comte, of California, holds a somewhat similar theory, in which he recognizes all life, as an offshoot of the Divine, coming to full self-consciousness in man. Theories there are, too, of a physical basis for continued existence of which Stewart and Tait's The Unseen Universe, or Willink's World of the Unseen, are typical. All the better science recognizes Deity in some form, though many think him unknowable. Hence on the evolutionary basis above proposed, on the theory of an extra mundane origin of life, and consequently on the negation of the hypothesis of spontaneous generation, there seems to be an element at work in the development of organisms that did not have its origin in matter, nor

force, and consequently antedating their organization may also outlast their dissolution. Thus biology is giving a scientific foundation for the more modern interpretations of truth.

If, however, the interpretation given evolution by Weismann, Büchner, Vogt, Heckel, Brooks, and others of this school of thinkers be correct, viz. : That mentality in all its forms, both inceptive and perfected, are but the product of energy springing from peculiar molecular or atomic combinations, resulting from the play of fatalism, then our problem assumes an entirely different relation to the existing and active forces of organic life. Instead of an element independent of matter and reaching its highest fruition in the human, we have but the perfected combination of white and gray matter, functioning so accurately as to produce in man his highest ideals. Instead of viewing the encephalon as a physical device on the part of consciousness, which it employs for the registration and retention of its psychic life, and the machinery whereby the past may be renewed, it becomes mentality itself. On this view there can be no continued existence, after the breaking down of the physical, other than that represented by "Conservation of Energy." Until, however, this theory can put forth a tenable hypothesis for life, for the freedom of will manifested in all altruism, and can give some satisfactory explanation of the teleological significance of existence, until then, it cannot remain a satisfactory theory.

Biology touches our problem in another important way, in its relation to the Weismannian hypothesis of a continuity of germ-plasm. As this will be discussed under the chapter on "Characteristic Beliefs," further mention need not be made of it here.

### B. Psychological Factors.

Psychologically, we assume that the doctrine of immortality has been a growth, and has had its stages of development, beginning possibly in the unconscious stages of animal existence. One meets very little difficulty in setting forth the progressive nature of the belief as exhibited in the life and laws of Jewry. In the teachings of Moses, the idea of immortality is dim, yet withal, there is throughout his writings the underlying consciousness of continued existence. It had assumed the form of a conviction rather than a doctrine. Sheol was to the Hebrew mind not the grave, but a shadowy personal existence. Several expressions found in Genesis and Numbers (Gen. v, 24; xxv, 8, 17; xxxv, 29; xxxvii, 35; xlix, 33. Numbers xx, 24), and in the other earlier books of this people are clearly indicative of this fact. With the coming of the psalmist a clearer light dawns. The later prophets proclaim its truth. In the New Testament it is a fundamental doctrine. Thus at

first, dim and vague, it finally became the conscious possession of the Jewish heart.

On the basis of evolution we have to assume, that there was a time when immortality was even more vague to the soul of man than it was to Abraham. We have to suppose that there was a childhood period in the life of the race, the same as in the individual, during which it lacked the mental capacity and the linguistic agency to wrestle with abstractions, and especially with the psychial idea of primal force, spiritual entity, and continued existence. There is every reason to believe that psychological evolution co-ordinates at every point biological evolution. This has been somewhat fully worked out by comparative psychology, aided, of course, by all biological studies, and especially those of animal activities.[1]

Ontogenetically we know there is a period of indifference corresponding to the imperfect functioning of the organism following fœtal life. This indifference period is a mere vegetative stage, and by slow degrees gives place to the second or emotional period which in its turn is followed by the third or intellectual. Hulings Jackson and Flechsig have clearly indicated the anatomical basis for these successive stages of psychic existence. Philogenetically the same three stages are well established, so that there is every justification for considering the deep fundamental principles that to-day are potent in the life of the race, to be the product of a progressive development, and there is no reason to believe that the doctrine of immortality forms any exception. It will, therefore, be the aim of the remainder of this section to indicate a few of the forces that have pushed this problem to the fore.

On the physical side, the tap root is that neural disposition induced by countless ages of reaction to painful and pleasurable stimuli that have created in the animal life the spirit of "self preservation," or as Schopenhauer would term it the "will to live." Stimuli that were pleasurable would tend to the perpetuation of the individual, while those that were painful would lead to its destruction; thus there would be produced, by natural selection, species in which the love of life would be stronger than indifference. Very early in the animal series memory entered, and with it began the mechanism which enabled him to more favorably react to his environment. As the

[1] The literature is so accessible that there is no gain in burdening this paper with the details of the subject. For the reader who is interested, perhaps Lloyd Morgan's Comparative Psychology is as good a handbook as any. Every work on evolution contains many of the cogent factors. Copes's Origin of the Fittest has many of them in a very convenient form. Guillet's Animal Activities is very full, and Burk's Study of Growth, presents the neurological facts.

emergencies of existence multiplied, this neural mechanism increased in intricacy until it reached its highest development in the cortex of man, when the self-conscious deliberative elements largely supplanted the more automatic activities of lower life. This will to live, strengthened by the accumulating increments acquired through succeeding periods, would fall with such force upon the dawning self-consciousness of man, that it would become impossible for him to conceive of his conscious existence as coming to an end. This we know to be the condition of the child and anthropology shows it also true of the savage of to-day. Even the highest type of mind practically believes every person else mortal except himself. This tenacious grasp of life, this persistent clinging to existence, is the earliest psychic element that has contributed to the development of faith in continued personal existence after physical death.

The second, and perhaps most potent agency, was the realization of his dual nature. Some one somewhere has said, that the profoundest, the most far-reaching discovery ever made by humanity was effected by the cave man, when looking to earth, and sky, and sea, he realized that he was different from all these, in that he was them all and something more. How man reached this dualistic conception is difficult to definitely determine. That death played a rôle therein is quite evident. Naïve primitive man, standing fearful and astonished before the desouled body of a dear relative, must have reached the conclusion, that something had left the dead one, who only a moment before spoke and moved, and that this something may be the individual personality, the impelling agent in the body dead in itself.

Sleep has confirmed this significant conclusion. An ingenious Greek gnomic poet has called sleep a pre-exercise of death, and in mythology, Hypnos and Thanatos appear as twin brothers. (Robinsohn: Die Psych. der Naturvölker. p. 2.) Through dreams sleep receives a significant content. Its peculiarity consists in this, that we do not know we are dreaming, but believe ourselves awake. Primitive man considered the dream a real experience, and when assured by his companions that his body had not left the couch, he necessarily concluded as in death that something had left his body, and hence would annul the dualistic conception of man.

Primitive man to-day, still maintains that man's soul has power to thus separate itself from the body, and may sport itself in many a fashion, may gather valuable information, or may enter into covenant relations with other spirits which will be binding upon the individual. The Greenlanders believe the soul at night goes hunting, or to the dance, or on a visit. (Cranz Historie von Grönland.) The Kantschadkan gains an-

other's boat by sleeping in it in his dream. The Buraten think the soul wanders over the earth during sleep, and brings back memories of its experience. The Vedanta teaches that the soul during sleep visits God. German Sagas speak of the danger of awakening a sleeper too suddenly. (Schwebel O. Tod und Ewiges Leben im deutschen Volkglauben.) The Bohemians consider it unadvisable to go thirsty to bed, as the soul may go in search of water and be drowned. (Grohmann Aberglauben und Gebraüche aus Bohmen und Mahren.) Meiners C. (Allgemeine kritische Geschichte der Religionen), tells how West India slaves committed suicide, in order that, in spirit, they might live again in their native land. The soul came from God, but in the waking life all connection with the spirit world was lost, and only at night could this association be resumed. This led to the belief in Dämons, and the power of receiving revelation by sleeping in some temple, especially that dedicated to Zeus. (Meiners.)

Marc Aurelius, through dreams, received information of a remedy for personal ills. Gallen was led to study medicine through his father's dream, and allowed himself to be governed by his dreams in the treatment of his patients. (Friedlander L. Darstellungen aus der Sittengeschichte, Roms.) According to Wiedemann (Die Religion der Alten Aegypter), the Egyptians believed the oracle giving gods would appear to them while asleep in their temple. Robinsohn has collected many instances to show the prevalence of belief in dreams. It is not necessary to go so far for evidence, as every person knows some one, who has had special information conveyed to him through the dream agency, and children are not always capable of distinguishing between the real and the dream experience. What stronger proof of the existence of the spirit of a dead friend did primitive man need than that during sleep his own spirit should hold communion with him in the spirit realm?

To this shadowy existence of the individual in dream life, H. Spencer would add the influence of the real shadow. He thinks the savage, when gazing into the water, would observe a reflection of his own person, and of the objects in the immediate proximity; and further, in sunlight, his body would constantly cast a shadow, an exact representation of himself. From these facts he would derive the idea that there is appended to the object an entity which, however, may be separated therefrom. Man would thus reach the conclusion that he was a duality. Dream-life would reinforce the conclusion of the shadow-life, and *vice versa*. Thus the very substantiality of the body would conduce to the belief that all of man is not flesh and blood.

Wm. Stern would add to these the impulse that would be

received from the reverberations of the voice, as reflected by hill and wood. How far these three, Dreams, Shadows, and Echoes, have been factors, it is impossible to determine, but that they may have moved the mind forward on the way to the thought of an after-existence certainly falls within the pale of possibility.

The conceptions of the nature of the soul, and especially of its mode of existence, must also have been cogent factors in strengthening the belief in immortality. The former has been sufficiently exemplified in a previous section. Of the latter it will suffice to say that the after existence was always clothed in the imagery of this life. With the characteristic inconsistency of the early mind, the soul and body were so completely fused that the domain of the one was supposed the sojourn of the other. The tomb became the throne of the soul, and to this fact may be traced the custom of burying with the body all the property of the dead one, with the hope that he might leave his descendants in the peaceful possession of their earthly existence. Dead feasts arose, and the Indian custom of placing baskets of food on the grave, in the belief that the cadaverous inhabitant would regale himself thereon and be satisfied. (Svoboda W. Die Bewohner des mikobaren Archipels. Intl. Archiv für Ethnologie 6 Bd.; Sippert J. Kultengeschichte der Menschheit 2 Bd.; Rohde E. Psyche S. 150 ff. 633.)

To this also may be traced the cult of the dead once so prominent in ancient Greece, India, and particularly China and Egypt. (Rohde E. Psyche S. 229.; Laws of Menu. IX; Holzmann A. German Mythology; J. Grimm Deutsche Rechts Alertümer: Strauss T. Schî-King S. 18. Remisch S. Die Agyptischen Denkmäler in Mirramar.) As the human race advanced in social and political life, and reached a higher stage of culture, the grave became no longer the abode of the departed. With the evolution of the domestic and social ideals, there was evolved a higher and more felicitous destiny for the soul. A Jenseits arose, a fairer zone, generally far removed from the present sphere of activity, which became a Fortsetzung or mere ethnological continuation.

Here, at first, there was no caste distinction, but gradually there was evolved a paradise for the valiant and the strong, while the weakling must find his future abode in a gloomy commonwealth. As civilization advanced to a higher plane, and moral motives became the determining factors of human conduct, it became expedient to make a clearer distinction of the two realms of the after life, and to set up a throne of justice at the entrance to the kingdom of death. Greece with her Minos, and Egypt with her 42 assessors of justice, form the classical examples. From the social sense of right and wrong, and the

moral sense of good and evil, of duty and transgression, there grew up the necessity for reward, compensation for the ills of life, remuneration of the good, punishment of the evil, the equalization of all the injustices of the sensuous existence, an ulterior reward in a Heaven or a Hell. (Grabowsky J. Der Tod, das Begräbnis U. S. W. Intl. Archiv. f. Ethn. 2 Bd. S. 186 ff.; Spencer Sociology 1 Vol. S. 226; Cronz Geschichte Von Grönland. Tylor: Primitive Culture 2 Bk. 87. Waitz Th. Anthropologie 3 Bd.; Holtzmann Deutsche Mythologie S. 198; Hirschfeld, H. S: Uber der Lehren der Unsterblichkeit der Seele bei den Verschiedener Völker S. 54; Schmiedl Der Kampf unes Recht S. 26 ff. Robinson Psychologie, Chap. IX. Runze Psychologie der Unsterblichtcerts glauben.)

Another motive, and one closely allied to the preceding, is the fear of death. This has a positive and a negative element. The positive is exclusively eudemonistic, particularly in regard to the departed, although an egoistic stratum is easily discernible. In the negative there are to be found two psychical dispositions, which are conjointly evolved, but which must be carefully discriminated and kept distinct, viz., fear of the dead and fear of dying (Runze Psychologie). The latter is generic, and extends down through the animal series. It is probably nothing more than the physical reaction to pain as indicated above. Through its manifestation Leibnitz and Bonnet have been let to assert that animals have a longing after immortality, and Arnold Ruge to declare immortality to be the disinclination of man towards dying. (Runze, p. 33: Buckle History of Civilization.) The very mystery that surrounds death makes it dreaded whilst that same mystery nourishes the immortality germ.

In order to comprehend the potency of the second of the negative elements, we need but remind ourselves that primitive man had the conception that the spirit retained connection with mundane life, influencing particularly for evil, inflicting disease and death upon negligent relatives, and performing all sorts of vampirism. As a consequence, there arose all those multitudinous rites of exorcism and mortuary customs for banning the dead. Mention will be made of a few of these, but it would far transcend the limits of this paper to exhaust them. To begin with the simplest: The Chinese in certain parts of the empire make addresses to the ghost of the departed, entreating it to go quietly to the grave like a good ghost. (J. H. Gray: China, pp. 200, 204.) Schoolcraft (Indian Tribes, Vol. V, p. 65,) speaks of the prevalence of a similar custom among the Dacotahs, the Karieng and other tribes. This mild fashion did not long meet the emergencies, so more efficient means were employed in dismissing the presumably unfriendly spirit. The

Slavonians pelted the ghost with sticks and stones and often hot coals. (Ralston Songs of the Russian People, p. 319.) Bastian informs us that a similar practice prevailed among the Bohemians. (Mensch in der Geschichte, II, p. 329.) According to Sonntag (Todten bestattung) stones are piled on the grave to keep the spirit down. From Tacitus (Germania Kap 27) we learn that the Germans were accustomed to raise great monuments over their dead, as they thought the monuments a burden to the dead. Robinsohn gives a number of people among whom this custom existed, and makes special mention of its use in connection with the burying of murderers.

The wicker-work that so frequently surrounded Indian graves, was originally a device to wall in the malignant sprite. According to Castrien (Vorlesungen über Frinnische Mythologie S. 122) the Finns and Dyaks were accustomed to thus enclose the burial spot with high, oftentimes sharpened paling. Means other than this have been employed to keep the spirit in its cell. The feet were often tied together, especially the two great toes, so also the hands. Spikes and other means fastened the body in the coffin. The Wallachians drove a nail through the skull, and the Californians and Damaras broke the spine. (Fraser Jl., Anthrop Institute, Vol. XV.) Mutilation has been extensively practiced, especially that of cutting off thumbs or hands or feet, in order that immunity might be obtained. In the case of ghosts suspected of vampirism, the body was exhumed, the heart and viscera removed, and the empty hull was then restored to the tomb, or else the whole body destroyed by flames.

Endeavor was also made to barricade the ghost against entering his former home. The simplest was to remove the sick one to some distant place. The Esquimaux are accustomed to transfer their sick to sheds, or especially prepared booths which can be destroyed after the decease of their gruesome inhabitant. Du Chaillu (Equatorial Africa, p. 384–385,) informs us that the Bakalin, in Central Africa, drive a sick one not only away from home, but outside of the village. If, however, a sick one should die in the village, they immediately abandon it. The Balondas have a similar custom, if a chief dies. (Wood: Nat. Hist. of Man, I, p. 419.)

The Andaman Islanders also abandon a place of death. (E. H. Mann: Aboriginal Inhabitants of the Andaman Islands, pp. 74, 77.)

In Russia and East Prussia, an axe was laid at the threshold. In Germany all the doors and windows are shut. Among many peoples, notably the Greenlanders, Norsemen, Hottentots, Bichuans, Samoieds, Ojibways, Algonquins, Lassians, Hindoos, Tibetans, Siamese, Chinese, Balinese, and Figians, special

egress is prepared, and after the removal of the corpse the way is sealed up. (Fraser, Jl. Anthrop Inst., p. 70, 1885.) The Arancanians strew the ground with ashes after the bier has passed (Klemm Kultengeschichte, V, p. 51). The Kakhyens scatter the ground with rice. In Germany, modern Greece, and in Cyprus, water is poured out behind the corpse. (Frazer, p. 77.) Scott, in the "Lay of the Last Minstrel," (See III, 13,) barricades the goblin page with water.

The Bohemians put on masks and otherwise disguise their person, so that the spirit may not recognize them and follow them home. (Bastian Mensch, II, p. 328.) Plutarch (Quaestiones Romanæ, p. 14,) indicates how the mourning customs of his times were the very opposite of life's ways, and every one is familiar with the Chinese custom of dressing in white. May we not see here the psychology of all our mourning customs, namely, an endeavor to "Bilk" the spirit of the departed? The custom of closing the eyes of the dead, blind-folding, the Jewish potsherd, the Russian coin, carrying the corpse feet first, burial by night, all belong here.

Fire has also been employed as a means of interception, especially among the Siberians, Romans, and Chinese, who would have the mourners step through or over fire. (Meiner's Geschichte der Religionen, II, p. 300. Festus: Aqua et igni. Gray: China, I, pp. 287-305.) The Vends use water instead of fire (Hampt. K. Sagenbuch der Lausitz, I, p. 254) and the modern Mytilenians and Cretans ferry the body across a stream. (Schmidt: Das Volksleben der Neugreichen.)

Numerous other instances might be given, but I have sufficiently illustrated in order to clearly demonstrate what a mighty influence custom has wielded over the human soul.

The reverse side of this double faced shield is the desire to know the dead are happy; a wish that must have arisen very early in the heart of the race; a wish that has to be considered psychologically and historically the origin of dead-feasts, a custom as extended in compass as the one we have just described. The literature of this has been so long before the reader that it is needless to rehearse the matter here. This desire to know that it has gone well with the dead, has led people to bury or burn with the corpse the things dearest to the person while living. It has led to widow burning, as in India; to human offering, as among the Aztecs; to all the oboloses extending from placing money under the tongue (Preller: Griechen Mythologie, I, 639,), to a certificate that the dying one has confessed and that the priest has granted absolution. (England H. Western, Rev.: Russia, V. 140, p. 172.) A wish that is still present in the highest stages of culture, as witness the masses for the dead in the Catholic Church. If we could see these

various practices in their incipient stages, freed from all the intellectual accretions of modern times, we would find therein that same psychic element that we have already designated as the tap root of belief in immortality, viz.: the inability to imagine non-existence, only it has become altruistic. When once the idea has become the dominant ideal of the race, its growth and influence but parallels those of other great psychological and historical ideals, and it has become a potent factor in the individual life in much the same way.

Closely allied to this is the reverence for renowned individuals. It is easy to think of a slave, or a serf, as dropping out of existence, but not so with the leaders of the race. Goethe's words over Wieland are characteristic of humanity everywhere. He says: "The destruction of such high powers is something which can never and under no circumstances, even come into question," Hero worship has prevailed everywhere, and has entailed an undying belief in the continued existence of the hero. Every land has its "Islands of the Blest," in which it installs its great in abundant reward.

Pain of separation and wish for reunion has had its influence, as has also the feeling of need for compensation for the troubles and inequalities of life. The great preponderance of apparent hardship, and wrong, and misfit of life, the constant injustice that is heaped upon the weak by the strong, the burdens that are laid upon those wholly unequal to the labor, all tend to create a hope that somewhere justice must be done. The incompleteness of this life, and the ambitious desires to complete life's tasks, have led to the view that earth is but a school for preparation for future greater usefulness, where the character here begun may be rounded out in all its symmetry and fullness. Ethics, too, has brought its tribute and laid it at the feet of this human ideal. The seducing influence of analogy as drawn from nature; the effect of death itself, which has constantly thrust upon man a score of questions concerning what lies beyond; and, finally, the firm conviction of the existence of a Creator, who is also the preserver of life, the personal realization in him of all that is incorporated in the word "Father;" all these have combined to strengthen in man the firm conviction, that "it is not all of life to live, nor all of death to die."

In more modern times, among more civilized people, these count as naught in comparison with the assurance that the Divine has twice revealed himself to man. Once in the thoughts and lives of the good and great of all ages, and particularly in the Christ, and once in the individual heart, to whom is given in this double manner the two-fold assurance of continued existence. To-day the faith is inseparably joined with the reli-

gious consciousness, and has received therefrom such momentum that the annihilation of the one means the destruction of the other. There are those who hold that immortality is wholly a "gift of grace," others who claim it to be a spontaneous development of mental energy, still others that its germ is found in all sentient nature, and that the full consciousness expressed in man is but the progressive growth of the fundamental germ. Personally I sympathize with the first, *i. e.*, it is a special endowment bestowed upon man when he became man through the introduction of self-consciousness, which carries with it the perceptive and conceptual powers. The second hypothesis is to me unthinkable. It has the possibility of neither logical nor empirical demonstration. The third I conceive to be in no way antagonistic to the first, as it is only a settling of the mode of operation of the laws that have produced this final culmination in man. Nothing comes from nothing. At the same time no man can lift himself higher than he is by pulling at his boot straps. The power that has been operating in nature, impelling her on from stage to stage, is none other than the manifestation of the Will that lies at the bases of the universe, and the hand that has guided the forces has been none other than that of the Divine. That there has been regular progression, few will deny; that it has been the product of blind chance, is a violation of the logic of existence.

## CHAPTER III.

### Moral Significance of the Doctrine.

A school of thinkers (Positivists) has arisen, who designate the doctrine of immortality an immoral doctrine, in that it tends to give (a) false views of life, (b) to create a spirit of selfish egotism, and (c) to set up a false standard of morality.

In order to test, as far as possible, the religious and ethical content of the doctrine, a special sectional question was added to the syllabus, which questions runs:

V. What influence has belief in immortality had on your life religiously? Has it acted as an incentive to Christian duty, to divine worship, and faithfulness in your devotions, to devote yourself to the work of evangelization, or any other self-sacrificing endeavor? Has it been a means of support, or a source of unbelief in your religious life?

2nd. Morally? Has it led you to a deeper appreciation of self, (b) of others? Has it spurred you on to right actions? Has it led you to be more careful in deciding problems involving right and wrong? Has life's work been more earnest? Has it created in you the spirit of self-salvation or led you to altruistic endeavors? Do you consider it a moral strength or source of weakness?

3rd. In everyday duties? Have you studied or labored the harder? Endeavored to reach higher ideals? Has the hope of a future life lifted

you over difficult places and enabled you to bear life's wrongs? or has it been a weight about your neck? If it were taken out would life lose any of its inspiration?

77 M. and 315 F. declare it to be an incentive to Christian duty; 68 M. and 229 F. find in it a support in worship and in private devotions; 83 M. and 334 F. are upheld thereby in their religious life generally. Only one found it a source of unbelief, and 4 M. and 23 F. fancy it has no influence whatever on their religious life; 4 M. and 4 F. are doubtful; 97 of the aged people find it utterly impossible to conceive of a religion that had no such hope; 50 of those reporting express no opinion whatever on this point. This is probably due to the fact that they were not professors of religion, and consequently could not answer from an introspective standpoint. If religion is to be interpreted as man's relation to the supernatural, then it is very evident why such belief should be considered one of the foundation stones of worship and all religious life.

The question on evangelization, miscarried, as the vast majority of those reporting considered it to mean, not any altruistic Christian endeavor, but entering the office of a public evangelist. 18 M. and 89 F., however, state that this belief has encouraged them in self-sacrificing endeavors, while 3 M. and 43 F. find it to have exerted no such influence.

A few typical replies are:

F., 26. Belief in immortality has certainly made life more religious, been an incentive to Christian duty and to divine worship. It has not led to devotion to evangelization, but it has to other self-sacrificial endeavors. It is surely a great religious support.

M., 21. The belief in immortality has been a veritable check-rein to me. If it were not for such faith I would not attend divine worship.

F., 28. Immortality has always seemed as real as my life, and I am thus unable to measure its influence. It has been an incentive to all right action.

F., 17. My belief in my duty to God rather than immortality has been the great support of my religious life.

It is possible to conceive of religious feelings divorced from the supernatural and devoted to humanity, or some other intra mundane object. For such, the doctrine of immortality have no weight, but for all those who find the supernatural rather than the positive religion the true ideal of life, immortality will always act as a transfusing and vivifying power, creating a social medium favorable to the growth of philanthropic feelings and endeavors.

To the question concerning the moral significance of the doctrine, 33 M. and 173 F. believe it has led to a deeper appreciation of self, and 55 M., 206 F., of others. No definite comparison can be made of its influence in creating a spirit of selfishness or of altruism. Constantly does one find the two

associated. The unanimous testimony is: "Belief in immortality has led me to a deeper appreciation of self but at the same time of others also. It has influenced me to endeavor somewhat for their salvation." It is very significant that of the total number reporting, but 3 M. and 21 F. mention self-salvation alone; 26 M. and 114 F. couple self-salvation with the salvation of others; 53 M. and 168 F. lay emphasis upon the altruistic resultant. Quite frequently does one meet the expressions: "This belief has created in me the desire to become a nun, a missionary, to labor for the poor, to fit myself so that I may properly influence my pupils, to strive to do something for the cause of Christ, to endeavor to elevate mankind and brighten life."

Among those reporting the consequent has been anything but the engendering of a selfish spirit. Rather has a deepened and broadened appreciation of human life flowed therefrom. It is very clear that belief in immortality has not been the only factor operating in the consciousness of those reporting. They have widened the term so as to make it synonymous with the religious consciousness, so that the fruits reported are the production of a tree with many branches. This does not vitiate the results, as the charge of selfishness is laid at the foot of religion itself. One must conclude from the data in hand that this doctrine is one of the main factors in social leaven.

67 M. and 216 F. pronounce it an incentive to right action. 67 M. and 247 F. declare its influence in determining them to be more careful in deciding problems involving right and wrong. 69 M. and 233 F. think it makes life's work more earnest. 93 M. and 339 F. have no hesitation in pronouncing it a source of moral strength. 2 M. and 4 F. consider it a source of moral weakness. 7 think it neither, and 21 M. and 35 F. are doubtful, or gave no opinion. Among those reporting one must conclude that belief in immortality is a great moral lever. 600 cases are not very numerous, but if one may add thereto the testimony of history, as well as the experience of life, one may be safe in generalizing. There have always been found those whose sole aim was to save their own little soul, and having accomplished this, as they thought, they neglected the great world of humanity outside themselves, or have centered all upon the world to come. Because there has been such a tendency in some quarters to disregard the affairs of life, it does not follow that the doctrine of immortality is intrinsically bad. Misinterpretation has been the sequestrating agent. But, even suppose it did occasionally lead to cloisteral life, it would not be a thing so very immoral.

Replies:

F., 17. My belief in immortality has led me to a deeper apprecia-

tion both of myself and of others. It has always spurred me on to right actions and led me to be more careful in deciding problems involving right and wrong. Often I wanted to do the wrong, but the thought of eternal consequences always influenced me in the right. My whole work in life has been more earnest. It has created in me the spirit which has led me to seek the salvation of others: I certainly consider it a moral strength.

F., 18. My belief in immortality has been an incentive to all that is good, but as I grow older and my experience widens I feel that to do right for right's sake, is the true spirit of mankind. Immortality, however, still remains a fundamental motive. It is to me a moral strength.

M., 24. Because of this belief I am endeavoring to lead a morally pure life. I certainly am more altruistic and morally stronger therefore.

F., 45. I find myself strengthened in every way by such hope.

M., 29. I do not see how there could be any genuine moral life without such.

This problem leads right into the very heart of the ethical life. Man's actions are the result of motives, and the question —what is the final aim or highest good? becomes a vital one. The schools of thought are divided. The subjective school would make the end of moral conduct a subjective state, either hedonic or eudemonistic. The objective school would set up a standard outside of the individual, such as perfectionism, evolutionism, naturalism, utilitarianism, duty for duty's sake.[1] The standard by which the moral worth of dispositions and actions are measured is (1) the moral law within, or (2) the effect of the act upon the welfare of all whom it reaches.

Our interest lies in the *motive* rather than in *criticism*. Here, too, thought is divided. One class of thinkers says the motive must lie outside the individual; *i. e.*, it must be authoritative and autonomous. The other school lays the stress upon a priorism and empiricism. The returns would justify the former. They show that the impelling force is the thought of responsibility. This does not necessarily exclude the performance of duty for duty's sake, but rather intensifies the idea of duty. A no less authority than Mallock[2] denies the validity of such language as virtue for virtue's sake, honest because honesty is the best policy. In his essay, which is a defense of the religious basis of morality against the charges of the positivists, and atheists, he shows that virtuous men are virtuous simply because virtue brings them something they desire which appeals to them as the highest aim of the supreme good. In the same way, vice is evil, because it entails loss. Thus, the ultimate aim of morality is happiness, and the question is, whether that happiness shall be confined to the sphere of earthly existence, or be extended to all existences. More specifically can human

[1] Paulsen: Introduction to Philosophy.

[2] Is Life Worth Living?

life, cut off from all future existences, supply the one thing indispensable to human happiness. That there have been found a few souls, who saw in humanity the good of human endeavor, must be confessed. Among those reporting, one says that life without the hope of immortality is to him still worth the living.

It would not be difficult, however, to show that loss of the sense of unending life has led to a lower standard of morality. The writer knows a young man whose early training was carefully religious. His early life also gave promise of an active pulpit career. In the course of college and university life he imbibed the doctrines of free thought, and finally of naturalistic determinism. To-day, his standard of life is positively immoral. He has become intensely selfish, and is a firm believer in free love. Findley (Memorials of Prison Life) states that in the confessions of many of the prisoners they attribute the beginning of their downfall to casting off a sense of future responsibility. The cases might be multiplied by the hundred. The problem is one that cannot be settled by numbers. There are too many individual elements. As stated above, some grand souls have cast off entirely the hope of an objective future existence, while some of the most debased creatures have had the firmest belief in a personal immortality. The worth of a doctrine lies first, in its fidelity to truth, and second, in its power to enforce its truth upon the heart of the actor. The morality of an action consists in the motive thereto being its own justification. If the doctrine of immortality intensifies life so as to make all of its motives to lead to self-justificatory action, then it cannot be charged with immorality. If, however, it tends to separate the motive and the justification or make the motive the product of the justification, then it loses its moral significance. In the opinion of the writer it belongs to the first class.

These returns also open up another interesting problem that cannot be discussed here, viz., individualism versus socialism, and suggest that the higher appreciation of the individual usually means a deeper insight into the profounder significance of the social life. The moral estimate one puts upon himself usually determines his estimate of his fellows. The higher view is probably correct which sees in the highest development of the individual the greatest good to society.

The problem of immortality has also had its influence upon the duties of every-day life. 11 M. and 92 F. find themselves encouraged thereby to a more thorough performance of the duties of life. It formed for them a sort of background for craft-integrity. 5 M. and 8 F. aver that it has had no such influence. 75 M. and 273 F. have thereby striven for higher ideals. 54 M. and 217 F. have found the hope a support in life's troubles. 1 F. has found it a hindrance, while 2 M. and 8 F.

are doubtful about its influence. There is thus clear testimony to the worth of the belief even upon the lower plane of activity.

A question was added to discover its general psychologic worth in life. It ran: "If it were taken out would life lose any of its inspiration?" 134 M. and 431 F. give a clear affirmative. 4 M. and 7 F. are in the valley of indecision. 3 M. 7 F. vote in the negative. A score gave no voice either way. These figures do not testify to the worthlessness of earthly existence, but to the worth of such existence when interpreted in the light of a higher possibility.

A few extracts are:

F., 16. My belief in the immortality of the soul seems to compel me to study and work faithfully. I am constantly seeking some means to reach my ideals. Trouble fell upon me, but the hope of the future helped me to bear up. If this belief were taken out of my life, I am afraid my existence would be one long dread of the end, a vain attempt at happiness.

F., 21. Immortality has been a great spur to me both morally and intellectually, and has encouraged me in times of difficulty. Life would lose nine-tenths of its inspiration, if my belief were taken from me.

F., 45. Immortality has always been a great encourager to me. If the hope were taken away life's inspiration would be gone and I should not care to live.

F., 18, who once believed in immortality but does so no longer, says: "When I had this hope life was sweet and worth the living, now it ends in darkest night and gloom."

M., 21. Life seems just as worthy without it, though annihilation is repugnant emotionally.

M., 32. Immortality has been no weight about my neck, but rather a life preserver. With it would go all of life's inspiration, and I should live not to crucify, but to gratify the appetites of the flesh.

M., 36. I am sure I could be quite indifferent as to men's throwing their lives away, if I thought these lives were such a bauble as the men themselves appear to think them. Life certainly would be a very imperfect and insignificant existence without the hope of a higher and more perfect sphere of activity.

M., 31. Belief in immortality has been to me a source of strength and encouragement, a stimulus to higher efforts and an incentive to do each day's duties not only for themselves, but for the part they are to play in preparing me for the inscrutable purposes of my existence. It seems to me that if it were taken out now, life would not lose so much of its inspiration, but whether I could ever have reached my present condition without it as an incentive, I am in doubt.

The aged people, with the exception of 5, were unanimous in confessing the belief in immortality to have been one of the most potent factors, operating on the development of their ethological nature. Some commend it as the supreme. Some of the expressions employed were: "Exerted a great influence." "The controlling influence." "Moulded my life." "Tremendous influence." "Foundation of life's endeavor," etc., etc. Their testimony corroborated that given by the younger people in the written replies. The study of Mr. Scott on old

age and death went to show that belief in immortality declines with increasing years. (*The American Journal of Psychology*, Vol. VIII, pp. 67–122.) The present study would show that it is deepened and intensified.

Two specific accusations have been laid against the ethics of an eternal existence. (1) Being hypothetical and undemonstrable, and therefore presumably untrue, it induces a false life, because, based upon a myth or mere infatuation, it makes that life, whose chief motive is drawn therefrom, a lie, which is the most immoral of all immoral things. To state this objection is practically to answer it. Its validity rests entirely upon the truth of the hypothesis. Now in our former sections it has been shown that, while there is no innate idea of immortality, there is equally in nature no absolute proof of the falsity of the teaching. Since science cannot deny the possibility of continued existence, it becomes pure arrogance to do as the positivist has done, *i. e.*, declare immortality a fable. Since one, therefore, cannot know empirically the certainty or uncertainty of this doctrinaire, one cannot characterize it as moral or immoral in the above specified sense.

The second charge is possibly a more legitimate one, namely, it is conducive to the spirit of selfishness. That there have been numerous instances of individual selfishness, resulting from an obscure perspective of the deep significance of continued existence, will be readily admitted. That selfishness in its mass representation, *i. e.*, as seen in humanity, even among Christian people, is the product of such an ideal, is emphatically denied. It is but the bitter fruit of naturalism. If in evolution alone we have hope, then we are most miserable, for there is then an end to all morality, since the "survival of the fittest" means simply survival is fitness and morality becomes utilitarianism.

It is not, however, in this sense that the positivist is thinking of selfishness, but rather in this that it tends to concentrate the efforts of the individual upon the life to come and its ulterior rewards, and the means of fitting one's self personally therefor and thus inducing a disregard for the individuals and the interests of this life. He makes the still more explicit charge, that to desire personal consciousness in perpetuity is selfish. No serious attention need be given to this latter as it enunciates a principle that would in its strict application annul all existence. It is certainly not immoral for one whose life is full of meaning, to desire an existence of years rather than one of days. If it be legitimate to cherish such hope for three score years and ten, why should it not be so for an endless ion. I confess with Davidson (Int. Jl. Ethics, Vol. III, No. 3, p. 347,) that to be "content with the prospect of annihilation seems to

me base pusillanimity." Huxley could say: "I confess that my dull moral sense does not enable me to see anything base, or selfish, in the desire for a future life among the spirits of the just made perfect, or even among a few such poor fallible souls as one has known here below." (Modern Symposium, p. 62.) This phase of the question may be dismissed as a mere sentiment. The former portion of the charge is more serious. The moral worth of a doctrine consists in its effect upon human action. Now if the doctrine of immortality turns man's gaze from earth to heaven, creates in him a disregard for the duties of life, and instills in him indifference to the terrestrial existence, then it would have been better had it never come into the world. There is abundant historic evidence to show that such has been the consequence in some quarters, and among a certain class of believers. It can, however, easily be demonstrated that this is the product of a superficial interpretation of what it means to be immortal. The doctrine of immortality must necessarily enlarge the horizon and thereby lessen the importance of purely earthly existence, just as the extension of astronomical knowledge has placed our planet in an entirely different scale of value, in its relation to the universe. But while it has taken away with one hand, so to speak, it has given liberally with the other, so that the motives of life, even earthly life, are thereby multiplied. The truth is, this doctrine is joined to another equally significant, in which and through which it receives its legitimate interpretation, viz.: "Whatsoever a man soweth that shall he also reap." The deep inner consciousness of immortality does not disconnect the two worlds. It makes all existence one, and plenitude of being, to borrow an expression from Davidson, the ultimate end of existence. Now plenitude of being does not consist in sensuous gratification. Its realm is the spiritual, the intellect, the emotions, the will (Ethics of an Eternal Being: Davidson), and its instruments are all the exigencies of life, and its goal is goodness.

It sees in humanity the chief agency for reaching this ultimate end, so that whatever prepares humanity for a better state here helps to prepare for a better condition hereafter. Thus altruism and egoism are merged into one by this higher perspective. The law of the immortal life is the law of love, and its condition is true being.

## Conclusion.[1]

The path through which we have come seems to lead to the following deductions:

1st. The soul has a growth that closely parallels that of the body.

[1] In order to reduce this paper to the limit of a Journal article, it has

2nd. The concept, immortality, has a growth that parallels that of the race.

3rd. Its origin, so far as this study goes, is the product of the psychic activities of man himself, and not the fruit of a body of innate ideas. This does not imply, however, that there is not some deep, fundamental instinct, which may have been the dynamic power impelling him to such conclusion.

4th. Science can give no absolute proof either for or against the teaching.

5th. Neither can psychology publish any ultimatum on the question, though it is clear that the conception of an immaterial entity in the philosophic sense must be abandoned.

6th. The testimony of the race consciousness would go to establish the validity of such a hope, but, as has been pointed out, this consciousness may be the product of biological factors, which in their gradual unfoldment have produced this dominant ideal in man.

6th. No importance can be attached to the phenomenon of spiritualism, as it is so constantly associated with fraud, and most of its manifestations that are not the product of deception can be explained clearly and satisfactorily by well established psychological principles. Neither can the mysteries of hypnotism, telepathy, and clairvoyance be adduced in support of the doctrine, only so far as they show the great complexity of personality.

8th. In the returns much mention is made of the testimony of an inner revelation giving clear evidence of the truth of personal continuity. It is possible to explain this psychologically as the accumulated heredity of countless ages, joined with the ontogenetic longing for perpetuity. Until it can, however, be shown that there is no teleology in the world, and that there is no Divine hand at the helm, such testimony must be accepted, though it cannot be empirically established.[1]

9th. The ethical worth of the doctrine cannot be impugned, though a superficial comprehension of it has often engendered a spirit conducive to the best interests of neither the individual nor the social body.

10th. We are led right into the heart of religious pedagogy,

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been found necessary to omit entirely a chapter on the growth of the belief among the Aryan and the Semitic peoples—particularly India, Jewry, and Egypt, a chapter on the various forms the belief has taken in the folk consciousness, in metaphysical and in scientific circles, and a chapter setting forth and discussing the arguments *pro* and *con*.

[1] Prof. James's recent monograph on Human Immortality points out how such consciousness can be intensified even through present physical agencies, and indicates a scientific basis for inspiration. This little book is the Ingersoll lecture for 1898, and appeared after the preparation of this paper.

and the one principle standing clearly to the fore is the growth of the individual paralleling that of the race. It does seem that the history of humanity on its way to psychical and religious enlightenment forms the point of departure for the modern instructor.

The question of religious pedagogy offers one of the most perplexing problems in the educational field. It does seem that present methods produce very undesirable and too often profitless results. The gross, erratic, abnormal conceptions of the soul and of heaven, which smack of the rankest materialism, as is shown in the returns, too often become fixed. They are as far from the probable truth as anything can be, and while we shall never know the exact nature of either of these, yet it seems an act of guilt on the part of the religious instructor to allow the growing imagination to be burdened with such conditions.

The question arises, what shall be done? This can best be answered by considering what is being done, *i. e.*, the methods now employed to develop the religious conscience.[1]

1st. There is the method of keeping from the child all knowledge of God, soul, heaven, until such times as his intelligence has gained sufficient strength to comprehend these in their essence. The objection to such method is that it makes faith a matter of the head rather than the heart. It is believed that the religious consciousness is a growth just the same as the other emotional manifestations of man, and, further, that it has its root in instinct. Now to make an instinct permanent, habit or use must enter, hence this method would fail entirely to utilize the golden moment.

2nd. There is the instruction method, which considers certain truths necessary for the child's salvation, and the sooner these can be injected into the child's brain the better. Though popular, this method violates all laws of growth, for it would produce men before boys.

A third, and perhaps more vicious method, is that which believes the child and youth must "sow his wild oats," or to put it into another form, he must know evil before he can be good. Consequently he is allowed to follow the devices of his own heart in order that the church may have the extreme pleasure of effecting his conversion in later years. Such method can find no pedagogical justification whatever, either in principle

[1] The reader is referred to two papers by Dr. A. C. Ellis in which many suggestions bearing on this problem will be found. (1) Sunday School work and Bible Study in the Light of Modern Pedagogy. *Pedagogical Seminary*, Vol. III, No. 3. (2) Suggestions for a Philosophy of Education. *Pedagogical Seminary*, Vol. V, No. 2.

or in practice, as it allows the formation of vicious habits of action and thought which a life cannot uproot.

What shall be done? Never let the child lose the animistic conception of the universe. Some method must be found for a unification of cold scientific fact and myth. He must be given the purest possible concreteness, but only so far as the exigencies demand. In our eagerness to teach wide we destroy all. The child constitution cannot form abstractions, and if we persist in presenting him with metaphysical conceptions, we may expect him to transmute them into concrete absurdities. We must conform to the laws of the growing mind and soul, and scrupulously observe the commonplace adage—never teach as a fundamental truth anything which will have to be unlearned.

Moral instruction should precede special religious, if the history of the race is to be our guide. Further, religion is only a transference of our thought for humanity and of our attitude thereto to God. It is the *love for mother* transformed into *love for God*. We must then get back to the Pestalozzian principle of making self-activity the basis for religious instruction as well as for the secular. What is actually needed is an analysis of the religious environment and an orderly consecutive arrangement of the material that it may lead to positive, definite ends, and an adaptation of this material to the stages of soul development.

Froebel's dictum that the child mind ripens and unfolds to the abstract only through the concrete has deep significance here. It would not be difficult to apply, as the home, the field, the forest, all furnish the necessary concrete material. We need a religious "*A, B, C, of Anschauung.*" God should first be presented to the child as a worker, and after as a revealer. Does not all this material suggest that the natural, normal growth of the child is through this gross materialism into a purified faith in God, soul, and immortality? May not the pedagogical question, then, be one of gratifying this longing of the growing soul by the purest, best concreteness, or as President Hall aptly says, should not the pedagogy of the ego follow discussion of the crude soul ideas of children savages?[1]

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In all this work I have incurred a great debt of gratitude. To President Hall for continuous aid and sympathy; to Dr. Burnham for numberless suggestions; to Dr. Chamberlain for many anthropological references and hints; and in various ways to the other members of Clark University. For returns, to many personal friends who wrote personal letters; to Miss

[1] *American Journal of Psychology*, Vol. III, p. 378.

Williams, of the Trenton, New Jersey Normal; to Principal Purington and Miss Smith, of State Normal, Farmington, Maine; Prof. Luckey, State University, Lincoln, Nebraska; Dr. Chrisman, Kansas State Normal; Principal Harrington, Wilton Academy; as well as to those mentioned in the body of the article.

# AMUSEMENTS OF WORCESTER SCHOOL CHILDREN.

By T. R. Croswell.

Educators are coming more widely to recognize that development following nature's laws is not always a steady growth in one direction, but often by sudden starts and rapid shoots at what are termed the nascent periods. They also recognize that, to guide the formation of true men and women, they must know more of what these nascent periods are, of what the natural tendencies of the child are in the normal process of his development. Such beliefs have led to the many attempts to study in a variety of ways the natural interests of children. The present study is but another such attempt based on the belief that the spontaneous activity of the child affords the best opportunity for the investigation of interest. It is not expected that the most careful study of the outward expression of the life of a limited number of children can settle the problem of children's interests; but we believe that this study, touching as it does the lives of several thousand children now attending our public schools, may serve some as a rough criterion of their work, confirming in many cases the results of general observation and honest experimentation, and in other directions pointing just as directly toward vital errors. Not only will it serve as a criterion of value, but will also contain many hints to the thoughtful teacher for special devices and methods of teaching.

This paper, originally intended as a preparation for a more extended study (which may yet follow), is based almost entirely upon the answers of some two thousand children in the public schools of Worcester, Massachusetts, to questionnaire No. VIII, issued in the fall of 1896 at Clark University. But these answers have been confirmed, as far as possible, by comparison with similar studies of about the same number of pupils from other localities, by the extended reading along this line, and by general observation. For the generous aid received, the writer feels under the greatest obligation to all contributors, and especially to the hearty co-operation and encouragement of Supt. C. F. Carroll, and of those principals and teachers who so kindly furthered the work in Worcester.

These returns, in round numbers, from about one thousand of each sex, include all grades from the kindergarten up to

and into the high school. They are from seven different schools, so selected that about a third of the children are of Swedish parentage, one-fourth of American parentage, and the rest are about equally divided between the French Canadians and Irish, with a slight sprinkling of other nationalities. The questions were intended to recall as far as possible each child's own experience without suggesting particular answers. In order to call out the various reactions of the child, the questions were put from a number of slightly different standpoints. For the most part the answers bear the stamp of originality and truthfulness.

In collating this material three general heads have been followed:

1. A study of the *variety* and *character* of the *games*, *toys*, and other *amusements* of the child. In brief a tabulation and study under a general head of all the things mentioned in the answers to the following questions.

TOPICAL SYLLABI FOR CHILD STUDY.

(Series for Academic Year 1896-7.)

VIII. SPONTANEOUSLY INVENTED TOYS AND AMUSEMENTS.

*A. For Children.* (Teachers are requested to ask their pupils to answer this part of the syllabus.)

Write your (*a*) name, (*b*) age, (*c*) sex, and (*d*) state whether you live in city or country.

I. What toys or playthings do you use most (*a*) in winter, (*b*) in spring, (*c*) in summer, (*d*) in fall?

II. What games and plays do you play most (*a*) in winter, (*b*) in spring, (*c*) in summer, (*d*) in fall?

III. Which of these are (*a*) your favorite playthings, (*b*) your favorite plays? Do you use most the toys and games you like best? If not, why not?

IV. Name other (*a*) games, and (*b*) playthings which you used when younger. Give age at which each was used most. Show your choice as above.

VIII. Describe any games you or your friends have invented. How long did you play them before giving them up? To what extent did other children imitate them?

IX. What do you play, or how do you amuse yourself (*a*) when alone? (*b*) When only two or three are together? (*c*) When more than three?

X. What do you do for amusement evenings?

XI. What games do you play on Sunday? What else do you do to amuse yourself?

2. A more careful study of question IX, *i. e.*, a study of the influence which special conditions of environment may exert.

3. A study of the creative work of the child when left to himself. Based upon answers to the following questions:

V. Describe any plaything, no matter how poor, which (*a*) you have ever made, (*b*) your friends have made.

VII. Describe anything you have repeatedly attempted to make, or wanted to do, but did not know how.

Below the fourth grade, owing to the difficulty in written expression, little was attempted beyond the answers to the first three questions. Those from the kindergarten and first grade were obtained by careful inquiry on the part of several teachers who very kindly took upon themselves the labor of writing down the statements of their pupils.

The 2,000 children mention over 700 different means of amusement.[1]

About 100 of these are sedentary games (chiefly cards), and 150 are with toys and common objects used as toys, which would tend to sedentary habits; 225 are active games or sports; 85 are such pastimes or employment as do not belong distinctively to any of these classes; while the writer was unable to find out even the nature of 130. 272 of these amusements were common to both sexes, 182 are mentioned by the boys alone, and 197 by the girls alone.

It has seemed best, however, to attempt to classify the amusements according to their most prominent function in the development of the child,[2] and to present the list at the beginning

[1] Space does not permit a description of these various amusements, but the works referred to at the close of this article describe the majority of those which are neither original or purely local.

[2] Although the classification given in Groos's *The Play of Animals* seemed to me very unsatisfactory and incomplete, that in his later work, *Die Spiele der Menschen*, is by far the most philosophical that I have seen, and had it appeared earlier it certainly would have influenced greatly my own work. However, as my manuscript was already in the hands of the printer, it seemed best to call attention merely to the main points of his classification. Assuming, as I have done, that the function of play is development, Groos has made two main divisions of the play activities: In the first, those instincts tending toward the physical and mental development of the individual, find expression; in the second, those tending toward social development. (I. Triebe erster Ordnung oder spielendes Experimentiren. Solchen Trieben, durch deren Einübung das Individuum zunächst einmal die Herrschaft über seinen eigenen psycho-physischen Organismus gewinnt, ohne dass dabei schon die Rücksicht auf sein Verhalten zu anderen Individuen in Vorgrund stände. II. Die spielende Bethätigung der Triebe zweiter Ordung. Solchen Trieben, die gerade darauf ausgehen, das Verhalten des Lebenwesens zu anderen Lebenwesen zu regeln). The first division is subdivided into three main groups, treating respectively of the exercise through play, of the sensory, the motor, and the higher psychic instincts of the individual. The second division has four main groups: Contests, Love Plays, Imitation Plays, and Social Plays. The last group, however, seems to me to be rather an extra emphasis given to the main characteristic of the preceding three, than an exclusive group. Although, perhaps Groos's classification is more logical and philosophical than my own, the reader would, I think, find greater difficulty in applying it successfully to the list of activities here presented.

of this study. Accordingly, in one main class are placed those *activities, aiding most directly in the motor development;* in the other class those *productive of general idea not distinctively motor.* These main divisions have been subdivided into groups more or less artificial, but serving to place before us kindred activities of the child, and thus affording a means of mass comparison. After every attempt at identification more than 125 different games must be left *unclassified.* However, as the most of these are not mentioned by more than one or two different persons, they have little bearing on the comparison of groups, though as indicating the great variety of amusements found among children similarly environed, they have considerable interest. A separate division is also made for those amusements reported by the childen as *played only when they were younger.*

The general form of presenting each group is in three paragraphs; the first containing amusements mentioned by both boys and girls, the second by boys alone, the third by girls alone. In these paragraphs the amusements are arranged for the most part in the order of times mentioned in the returns, and after each game are numerals giving its standing, thus: Tag B 356–73, G 442–93, shows that 356 boys out of a total of 1,000 speak of playing tag, and 73 of these 356 considered it a favorite, while 442 girls out of 929 play it, and with 93 it is a favorite.

## A. Amusements Productive of General Ideas.

### *1. Original Make-believe Games.*

Play House B 59–5, G 365–54; Play School B 69–1, G 257–32; Play Horse B 166–26, G 47–3; Play War B 55–3, G 8–1; Play Fire B 41–9, G 3; Play Church B 4, G 9; Play Sunday School B 4, G 10; Santa Claus B 4, G 3–1; Salvation Army B 4, G 6; Dress Up B 3, G 6; Policeman B 15–1, G 2; Farmer B 3, G 1; Milkman B 1, G 3; Doctor B 1, G 1; Indians B 10–1, G 1; Bear B 13 "when younger," G 13; Pig, including "Pig Pen" and "Pig Stabbing" B 4, G 3; Fish B 1, G 1; Toll Gate B 3, G 1; Show, Circus, etc. B 4, G 7; Horse Car B 1, G 1.

*By Boys Alone.* Play Ice Cart 10, Ragman 3, Peddler 1, Judge 4–1, Mail Car 2, Shoemaker 1, Library 1, Dutchy-Greenhorn 1, Clown 1, Daddy 1, Dungeon 1, Clubroom 1, Robbers 2, "Deliver your Goods" 2, "There's a Burglar in the Parlor" 1, Wildmen and Tiger 1, Buffalo 1, Indians and Wild Horse 1, Indians and Cowboys 4, Indians and Robbers 1, Monkey 3, Training 1.

*By Girls Alone.* Play Parties, Tea Party, Doll Party 5, Theater 5, Giant 2, Postman, Stage Coach, Fairy Queen, Prince, Lady, Dressmaker, Milliner, Marching, Band, Queens, one each.

### *2. Play with Toys.*

Dolls B 39-6, G 621-233; Teaset B 8, G 242–73; Doll Carriage B 5, G 233-80; Doll Furniture B 3, G 79-30; Doll Cradle B 1, G 131; Doll Table B 1, G 15-1; Stove B 1, G 15-3.

*By Girls Alone.* Doll Bureau 16-4, Doll Piano 8-4, Dolls' Clothes 3, Flatiron 5, Washing Set 1, Sewing Box 3, Doll House 3-1, Doll Swing 2, Doll Slippers 1.

Horse B 17-1, G 4; Sheep B 2, G 1; Dog B 2, G 1. The following are mentioned by Boys alone, although several girls speak of having played with such toys at an earlier age. Elephant, Crocodile, Monkey, Wooden Pig, one each. Wagon, Express, and Dump Cart B 188-35, G 7; Train, Engine, Cars, B 21-5, G 8; Blocks B 37-7, G 9; Pea Blower B 15-1, G 1; Balloons B 4, G 1; Windmill B 2-1, G 2; Whistles B 35-6, G 3; Drum B 31-8, G 3; Harmonica B 15-5, G 4; Horn B 9, G 3; Rattle B 1, G 1.

*By Boys Alone.* Guns (wooden) 17-3, Knives 17-6, Swords 12-11, Whip 7, Reins 5, Toy Soldiers 2, Flag 1, Cannon 1, Boat, Ship 35-3, Water Wheel 4-1, Water Hammer 2-1, Jumping Frog 3-1, Fighters (clothespin) 3, Jumping Jack 2, Pop Gun 1, Squirt Gun 1, Dice 7-1, Clapper 7.

*By Girls Alone.* Jack-in-the-Box 2, Toy Watch 1, Wooden Hammer 1, Horse Car 1.

### *3. With Common Objects Used as Toys.*

Dog B 36-5, G 11-3; Cat B 17-2, G 9-1; Horse B 4, G 3; Baby B 2-1, G 3; Leaves B 75-2, G 112-6; Flowers B 32-1, G 102-1; Horse Chesnuts, "Horse Cobbles" B 85-5, G 7; Nuts, Nutting B 48-1, G 28; Trees, Climbing Trees B 25-1, G 11; Apples B 18, G 8; Berries, Berrying B 16, G 6; Picking Fruit B 5; Acorns B 3, G 19; Sap B 1, G 1; Eat Food B 1, G 1; Hot Cross Buns B 1, G 1; Hay, Playing in Hay B 20-3, G 18; Grass B 31, G 8; Sand Dirt B 21, G 18; Sticks B 18, G 12-1; Stones B 12, G 13; Water B 8, G 3; Fire B 5, G 1; Tin Cans B 9, G 7, Tin Dishes B 3; Trunk B 4-1, G 3-1; Bells B 3, G 3; Box B 1, G 3; Buttons B 3, G 2; Matches B 4, G 3; Pail B 3, G 3; Soap Bubbles B 1, G 3; Clothespins B 1, G 1; Broom B 1, G 1.

*By Boys Alone.* Pigeons 5, Pigeon Flying 1, Birds 2, Parrot 1, Poultry Show 1, Toads 4, Frogs 1, Rabbits 4-1, White Rats 2, Cows 2, Goats 2, Living Animals 2, Pigs 1, Lanterns 9, Valentines 8, Jack-lanterns 7-1, Fireworks 4, Pot 2, Bench, Bicycle Buttons, Blank Cartridges, Crowbar, Boots, Cartwheel, Wheel, Dust-pan, Fork, Toothpick House, Strops, and Spool of Thread, one each.

*By Girls Alone.* Mud, Mud Pies, etc., 24-2, Clover, Oakballs, Oranges and Pears, one each; Lamp, Candles 5, Basket 4, Rocking Chair 4, Jacket 2, Parasol 2, Spoons 2, Stamps 2, Bottles, Cap, Coal-hod, Fans, Mother's Skirt, Pillow, Screen, one each.

### *4. Occupations Common Among Children.*

#### IN-DOOR.

Books, Reading B 83-7, G 108-22; Studying B 2, G 3; Camera B 7-2, G 1; Drawing, Painting, etc., B 22-2, G 9; Blackboard B 2, G 13; Pencil B 2, G 3; Ruler B 1, G 1; Slate B 6, G 15; Paper, Paper Cutting, Colored Paper B 4-1, G 4; Desk B 1, G 3-2; Talking B 7, G 7; Tell Stories B 4, G 12; Riddles B 4, G 7; Singing B 11-1, G 22; Musical Instruments B 20-4, G 60-10; (of these the following are mentioned specifically, Piano B 6-1, G 51-9; Violin B 5, G 1; Banjo B 1, G 1; Flute B 3; Music Box, Melodeon, Harmonica, Accordion, and Zither, by one boy each; Appollo Harp, Autoharp, Mandolin, by one girl each;) Dance B 4-2, G 15-3; Parties, Social B 4, G 6; Carpentry, Tools, Tool-box, Saw, Hammer and Axe, etc., B 41-6, G 3; Jack-knife B 12-2, G 1.

*By Boys Alone.* Printing Machine 5-1, Typewriter 3; Debating Club,

Go to Public Lectures, Library, French Book, Bookkeeping, one each; Jig Saw 5, Leather and knives 1, Building Log Cabins 1; Electric Battery 3, Electric Toys 2, Electric Pulley, Experiments in Electricity or Chemistry, Telephone, Run a Stationary Engine, one each.

*By Girls Alone.* Writing, Writing Letters 5, Assume Characters and Charades 4-1, Practice Reading, Recite Poetry, Spell, Study Catechism, one each; Microscope, Scales, Theater, Opera 3, Play with Boys 1, Fancy Work 15-1, Crochet 15, Sew 19-1, Patch Work 1-1, Make Candy 4, Pop Corn 2, Stove 2, Clean and do Chores 1, Collecting Tintypes.

## OUT-DOOR.

Shovel, Hoe, B 61, G 12-1; Rake B 12, G 3; Wheelbarrow B 18-1, G 2; Gardening, "Tend my Plants," "Plant things in Spring," B 6, G 6; Walks, "Go to Walk" B 14-2, G 25-2; "Go to the Woods to have a Good Time," "Romping in the Woods" B 2, G 1; Camping Out B 2, G 2-1; "Fresh Air," "Shovel Snow for an excuse to get out" B 1, G 1.

*By Boys Alone.* Butterfly Net 2, Catch Bugs 2, Whooping 2, Collecting Eggs 1, Peddle Papers 1.

*By Girls Alone.* Lawn Mower and Hose 2, Picnicing 2, Play in the Sun 2, "I go away for amusement," Go out with the Baby, Dig Potatoes, Look at Birds, Go Shopping, one each.

## CARDS.

Cards B 163-34, G 151-51; Old Maids B 38-12, G 73-20; Authors B 28-2, G 50-10; Peter Coddles B 2, G 15-3; Robinson Crusoe B 8-3, G 7-3; Snap B 6-2, G 8; Anagrams, Letters, Spelling Game B 8, G 5; Napoleon B 6, G 1; Lost Heir B 7-1, G 1; Chicopee B 7, G 1; Bible Game B 2, G 5-1; Dr. Busby B 3, G 3; Christmas Goose B 1-1, G 5-4; Cinderella B 3-1, G 3; House That Jack Built B 3, G 2; Jack the Giant Killer B 3, G 1-1; Mail Express B 1, G 1-1; Pussel B 1, G 3-1, Whang B 1, G 2-1; U. S. Puzzle B 3-1, G 1-1; Shopping Game B 1, G 3; Waterloo B 2, G 2-1; Literature Game G 3-1; Literary Women B 1; Noted Men of America G 1; Solitaire B 2, G 1; New Market B 1, G 1; Speculation G 3; Penock G 1.

*By Boys Alone.* Cock Robin, Columbus Base Ball Team, Bluff Cards, Delagoa's Travels, Hispaniola, Princeton and Yale Foot Ball Game, Slap, Massachusetts Puzzle, one each.

*By Girls Alone.* Louisa 7-3, History Game 4, Auction 3, Flag Game 2-1, Muggins 2, Heedless Tommy 2, Give Away, Everlasting, Geographical Games, Cities of Our Country, Goose Gander, Golden Locks, Game of Progress, Star Game, Desperation, Flower Game, Fortune Teller, Prisoner of Zenda, Rance.

## TABLE GAMES.

Checkers B 277-87, G 189-34; Dominoes B 185-42, G 133-26; Chess B 25-3, G 1; Puzzles B 21-3, G 13-1; Lotto B 21-4, G 47-8; Go Bang B 11-2, G 11-4; Tic-tac-too B 11-1, G 10-2; Fox and Geese B 4, G 14-1; Halma B 2, G 5-1; Crocinole B 7-1; Parchesi B 17-2, G 40-17; Messenger Boy, Errand Boy, Telegraph Boy, Newsboy, Office Boy B 31-10, G 16-4; Nellie Bly, A Trip Around the World, A Race Around the World, Around the World in 80 Days B 17-3, G 7; Backgammon B 12-2, G 15-3; Old Mother Goose B 3, G 14-2; William Tell B 1, G 13; Cuckoo B 4-1, G 6; Yacht Race B 5-1, G 2; Steeple Chase B 2, G 4-1; Cash B 3-1, G 1; India B 2, G 2; Innocents Abroad B 3, G 1; Jack and the Beanstalk B 2, G 1; Little Miss Muffit B 1, G 3; Zigzag Kangaroo B 2, G 1; Bobb B 1, G 2; Arena B 1, G 2.

*By Boys Alone.* Toboggan Slide Game 2, County Fair, Sailor Boy, Three Horse Race, one each.

*By Girls Alone.* Crossing the Alps 3-3, Drummer Boy 2, Bicycle Game 2-1, Little Bo-Peep 2-2, Crossing the Ocean, Lost in the Woods, King Quoits, Stick Game, one each.

PARLOR GAMES.

Hide the Button B 14, G 55-7; Hide the Thimble B 15, G 26-2; Quaker Meeting B 5, G 10; Guessing Games B 10, G 2; Post Office B 3-1, G 6-3; Shouting Proverbs B 1, G 3.

*By Boys Alone.* Send my Ship to China 2, My Cook does n't like Peas 1, Jedkins Up 1, Ghost 1, Kiss the Pillow 1, One, Two, Three, Go Back 1.

*By Girls Alone.* Donkey Game 4, Strike an Attitude 4, My Ship Comes Laden with 2, Clap In and Clap Out 2, Buff with the Wand, Fortune Telling Games, Adjective Stories, Hunt the Slipper, My Lady's Toilet, Nonsense, Simple Simon, The Miller, Peek-a-boo.

## B. Amusements Productive of Motor Development.

### *1. Traditional Ring Games.*

On the Green Carpet B 6, G 62-10; Grandmother Grey B 5, G 53-10; Go In and Out the Windows ("Winrows") B 4-2, G 40-5; Lazy Maid, Lazy Mary, Lazy Bessie B 2, G 33-2; Water, Water wild Flowers B 1, G 33-2; Ring Around the Rosy B 5, plus 10 at an earlier age, G 31-5, plus 10 earlier; Farmer in the Dell B 8-2, G 26-5; London Bridge B 3 (plus 11 earlier) G 23-3; Round the Mulberry Bush, "Round the Barley Bush" B 2, G 14; Billy, Billy Button B 5, G 1; Three Kings B 1, G 4; Jack and Jill B 1, G 4; Tin Tin a Poppy Show, or Pin, Pin," etc., B 1, G 4.

*By Boys Alone.* Bushel of Wheat, Bushel of Rye 2, Fly Kitty through Peals 1.

*By Girls Alone.* Jennie à Jones, Jemima Jones 24-3, Poor Tommy is Dead 14-2, Little Sally Waters 12 (plus 6 earlier), Forty Girls go Round the Ring, "Merry Girls, etc. 11-3, Draw a Pail of Water 4, Here come an Old Woman from "Farmerland" (or Cumberland) 5, Here comes one King 1, Here's the Way we Wash our Clothes 1, Have you any Bread and Wine? 2, Lady Bug, Fly, Fly! 1.

### *2. Games of Chase.*

Tag B 356-73, G 442-93; Hide-and-Seek B 241-74, G 427-132; Relievo B 356-126, G 194-48; Black Tom and Black Jack B 102-26, G 97-14; Drop the Handkerchief B 22-2, 101-11; Lion in the Den B 4, G 80-22; Puss in the Corner B 35-3, 73-9; Steps B 9, 65-9; Hare and Hound, Hunt the Hare B 65-13, G 6; Blindman's Buff B 42-2, G 64-13; Hill Dill B 45-6; 47-4; Run, Sheep Run, or Sheep Lie Still B 58-10, G 36-11; Bull in the Ring B 42-7, G 13; Bar Up B 42-6, G 20-2; Snap the Whip B 41-3, 50-2; Colors B 6, G 40-4; Duck on the Rock B 37-5, G 36-6; Stealing Eggs B 35-3, G 9-1; Birds B 9-1, G 25; Trade B 6, G 23-2; Old Witch ("Oh, Mother the Kettle is Boiling over," "Sunday, Monday," etc., "Old Man") B 6, G 19; Pig Tail B 5, G 18-1; Pinch Me, Oh! B 13-2, G 1; Last Couple Out B 1, G 12-5; Bonney B 6, G 3; Rachel and Jacob B 6-1, G 3; Chase the Squirrel B 6-1, G 2; Chase the Fox B 2, G 2; Gypsy B 3, G 3; The King (I'm on the King's Land) B 1, G 2; Lead, Leadman B 2, G 12-1, "Pond, Pond Pull Away," "Pump, Pump Pull away" B 1, G 1; Rush B 4, G 1; Pound the Back B 2-1, G 6-1; Fox, Fox and Goal B 2, G 1; Grand Daddy Long Legs (An Original Game of Chase on Stilts) B 2, G 1, Skip B 3, G 1.

### *3. Contests with Objects.*

Ball B 679-241, G 409-67; Marbles B 608-115, G 130-21; Football B 455-151, G 1; Jackstones B 28-2, G 341-63; Hockey, Shinney, Polo B 313, G 8; Top B 176-28, G 11; Hop Scotch B 16, G 154-21; Croquet B 62-3, G 148-52; Hoop B 71-3, G 110-14; Stilts B 70-7, G 12; Bean Bag B 4, G 72-7; Pick Knife B 57-4, G 3; Tenpins B 53-10, G 6; Tennis B 51-10, G 31-10; Tip Cat B 33-1, G 10-2; Tiddledy Winks B 22-6, G 31-3; Pillow Dex B 16-2, G 21-4; Horse Shoes, Quoits B 19-2, G 1; Fish Pond B 12-1, G 15; Pool, Billiards, B 13-2, G 2; Jackstraws B 4, G 11; Golf B 4-1, G 1; Cricket B 4, G 1; Battledore B 1, G 3; Bagatelle B 2, G 3; Parlor Ring Toss B 1, G 1.

*By Boys Alone.*—Boxing 36-7, Fight for fun 1, Fencing 1, Sling Shot 22, Bow and Arrow 15-2, Hand Ball 4, Basket 2, Tug of War 5, Vaulting Pole 2, Shovel Board 1, Tivoli 1, Roly Poly 1.

*By Girls Alone.*—Shooting Game 1.

### *4. Other Athletic Pastimes.*

Racing, Running B 51-13, G 8; Leap frog, "Foot and Half" B 48-8, G 1; Jumping B 44-4, G 8; Gymnasium, Gymnasium Apparatus, Dumb bells, Indian Clubs, etc., B 22, G 11; Poison B 2, G 16-1; Swinging B 13-1, G 22-4; Hurdles B 1, G 2; Wall Fences B 2, G 1; Bicycle, Tricycle, Velocipede B 160-78, G 91-46; Swimming B 119-26, G 15-2; Kite, Parachute B 107-5, G 12; Fishing B 80-19, G 7-1; Boats, Canoes, Rafts, B 78-18, G 27-4; Guns, Rifles, Hunting B 64-14, G 3; Tents B 33-2, G 14-1; Horseback Riding B 7-1, G 4; Carriage, Sleigh, Buckboard, Tally-ho B 16-5, G 22-3; Sled B 555-100, G 498-69; Skates B 538-168, G 412-113; Snow Balling B 123-14, G 98-3; Snow Shovel B 65-1, G 19; Snow Shoes, Skees B 58-3, G 10; Snow Man B 36-3, G 26-1; Snow House B 28-3, G 23-2; Snow Forts B 20-3, G 14; Toboggan B 2, G 2.

*By Boys Alone.*—Punching Bag 6-1, Wrestling 3, Vaulting 2, Last Dare 1, Roller Skates 1, Traps 4, Ice Boat 1.

*By Girls Alone.*—Jump the Stick 15, Hopping 2, Walk on Cans 2, Sliding on Feet 1, Somersaults 1, Merry-Go-Round 1, Snow Plough 2.

### *2. Practical Jokes.*

Kings and Queens B 1, G 2.

*By Boys Alone.*—Digging for Gold 7, Pee-wea-mo-yet 2, Knight of the Whistle 1, Let 'er Fly 1.

## C.

### *1. Games Mentioned Only as Outgrown.*

*By Boys Alone.*—Cuckoo, Devil in the Band Box, Filling bar of soap with tacks, House that Jack Built, Play in the Tubs, Stealing Chickens.

*By Girls Alone.*—Barker, Drumming on Tin Pans and Marching, Five Little Rabbits, Fox and Cat, Little Boy Blue, Pea Porridge Hot, Peek-a-boo, Peter and Rachel, Roll Your Hands, Selling Birds, Stealing Chickens, The Cobbler, This is the mother good and dear.

### *3. Unclassified.*

Attack, Farmer Jones's Pigs; Ducks and Geese, "The Geese, The Geese," Goose in the Garden, Hide the Gig, Happy Family, Mash, Pilgrim's Progress.

*By Boys Alone.*—Allart, Bombay, Boston Ring, Bug-a-Boo Bill, Catch my Bear, Catch the Wild Bull by the Horns, Catch the Fox by

the Tail, Croweck, Coast in the Well, Dickey Dick, Duckrick, Four Famous Funny Fellows, Four Louse Eaters, Free the Ring, Full Force, Galic, Gig, Mash the Gig, Muzzle the Gig, Gold Bank, Half Eagle, Have you ever seen a nigger, High Giggles, Hill Climbers, Kymo, Lilostillgo, Log Cabin, Man in the Moon, Pat, Peter Pumpkin Eater, Pike's Pike or Bust, Plume, Plump, Pooh, Range, Soldier on the Road, Six and Four are Ten, The Spear, Spole, Stag, Tarhand, Tat, The Capitol at Washington, The King Quoth, Three Mice, Twenty-three Fishers, Twiddles.

*By Girls Alone.*—All Nations, Are you in it? Babes in the Woods, Bean Stalk, Bean Stalk Stay, Black Jill, Boots without Shoes, Build the Bridge, Cut the Cheese, Demotion, Everlasting March, Feather Deck, Fly little boy, Forfeit, Four and Twenty Blackbirds, Golden Eggs, Gold Spoon, "Halo my children," Happiness, Happy Go Lucky, Have you ever? Hillock, Hunter, King Cole, I'm posted, I went to Paris, Jack-of-All-Trades, "John, John, I'll tell your daddie," Jumbo, Luck, Milk Maid, Minute Man, Mother Hubbard, Musks, Needle and Thread, Pall, Parlor Mantelle, Paws and Claws, Pick me out, Poor Farmer, Princess, Punch and Judy, Rain, rain, rain, Riding Hood, Road to Washington, Rock-a-Bye Baby, Sheep and Dog, Six Sticks, Snake Game, Squirrel, Strategy, Sunshade, The Poor Cat, Telka, Ticket Office, Tom Old Apple-tree, Tug Away, Twenty-three Dishes, Ward Game, What Katy did at School, Who'll go to heaven first?

## III. General Function and Characteristics.

What are the characteristics of such typical amusements as ball, marbles, jumping rope, tag, checkers, cards, dolls, playing horse, cycling, playing with leaves, stones, reading, etc.? Certain of these are marked by active physical exertion, but this cannot be said of all. Some are dramatic; some call for the exercise and display of varying degrees of skill. Some demand the co-operation of numbers and so necessitate a social community, others are adapted to the individual alone. Some plays are deliberative, others appear to be entirely impulsive. Some amusements satisfy if the individual has the opportunity merely to exercise his own skill, his mastery over self and over inanimate objects, while others necessitate the subordination or mastery of another. In most games the element of chance is present, the risk of not securing the desired end adding zest to the other attractive features of the games.

Most theories offered to explain the play of children begin by assuming a "play impulse" sharply differentiated from all other activities, yet the serious character of much play is a fact of common observation. The necessity of accounting for such an impulse has led many to assume again, as the basis of all play, an exceptional state of neural activity which is termed the condition of "overflow energy."[1] This, perhaps, is the

[1] Friedrich Schiller: Letters upon the Æsthetic Education of Man. See letters 25 and 26.

Herbert Spencer: The Principles of Psychology. N. Y., 1897. Vol. II, p. 627 ff.

most widely accepted theory, but it confines play to such physiological conditions as produce an excess of vital energy and also necessitates looking further for an explanation of the character of the resulting activity. It is the theory of animal rather than of human play. It does not give sufficient weight to the fact that both children and animals participate in certain games after a condition of extreme fatigue has been induced. To explain the varying character of the activity, Spencer adds "imitation" of some external act, serving as an extra stimulus at the moment when the pent-up energy is about to discharge.[1] Groos, accepting this theory as explanatory merely of a condition favorable to play, adds and emphasizes the part played by "instinct:" "Thus we see that the explanation of play by means of the 'overflow-of-energy' theory proves to be unsatisfactory. A condition of superabundant nervous force is always, I must again emphatically reiterate, a favorable one for play, but it is not its motive cause, nor, as I believe, a necessary condition of its existence. Instinct alone is the real foundation for it. Foundation, I say, because all play is not purely instinctive activity. On the contrary, the higher in the scale of existence, the richer and finer becomes the psychological phenomena that supplement the mere natural impulse, ennobling it, elevating it, and tending to conceal it under added detail."[2] According to his theory "the animals do not play because they are young, but they have their youth because they must play."[3] Others, too, have emphasized "instinct," and through it sought a teleological explanation for the variety in play, while the recapitulation theory helps us to explain movements which seem to have but little to do with later life, on the ground that the child in the process of his development must of necessity reproduce the early history of the race.[4]

Nevertheless, as we consider all the amusements of the child we may, I think, assume that all his activity, be it physical or mental, is *always an expression of his psychic life, and that it always reacts upon that life.* Such a view of play seems to have been taken by Froebel, James and Wundt. The first sees in play the "self-active representation of the inner—representation of the inner from inner necessity and impulse."[5] Wundt finds, in the process of "association of immediate impressions with earlier ideas," the beginnings of an active imagination

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[1] *Ibid.*, Vol. II, p. 709.
[2] Karl Groos: The Play of Animals, translated by Elizabeth L. Baldwin. N. Y., 1898. p. 24.
[3] *Ibid.*, p. 77.
[4] Burk, Frederic L.: Teasing and Bullying. *Ped. Sem.*, Vol. IV.
[5] Froebel: *Education of Man.* International Education Series, N. Y., 1896. p. 55.

which "shows itself with an impulsive force that the child is unable to resist,"[1] and this force being unchecked by inhibiting ideas, expresses itself in the varied activities of childhood. How varied this activity may be, when unchecked by inhibiting ideas such as influence adult life, may be apprehended by weighing the following words of James: "Where there is no blocking, there is naturally no hiatus between the thought process and the motor discharge. *Movement is the natural immediate effect of feeling, irrespective of what the quality of the feeling may be. It is so in reflex action, it is so in emotional expression, it is so in the voluntary life.*"[2] The italics are from the original text.

In whatever way Froebel may have conceived his "inner necessity and impulse," it seems impossible of translation into any terms, consistent with modern psychology, which do not also include "the association of immediate impressions with earlier ideas," and with "the thought processes" which form the initiative to action. In this sense the occasion for activity would not be confined to the discharge of motor cells, due exclusively to the general superabundance of neural energy; but would include such a discharge occasioned by great local activity in some psychic center, due to any stimulating agency, though this agency might be merely the stimulating effect of some metabolic process. The latter is the most plausible explanation which we have at present of many of the seemingly impulsive movements in the young, as for example of the vigorous but aimless kicking of the infant, or of the frolicking movement seen in the young animal. But a similar psychic activity with its accompanying motor discharge may be occasioned by varied external stimuli, and may continue far beyond the limits of healthy exercise—examples of which are far too frequent in many forms of nervous disease; and all who have ever experienced the state of "being too tired to rest," will readily recall the almost uncontrollable impulse to motion, although fully realizing the necessity of rest, and being irritated by the slightest disturbing influence.

This explanation of activity does not roughly separate that of the child from that of the adult. In both is found the impulse to action, due to metabolic processes or to the immediate reaction to some objective stimulus, and the deliberate action having some definite end in view. That the one form of stimulus is more frequent at one period of life, does not stamp all the activities of that period as different from those of the other,

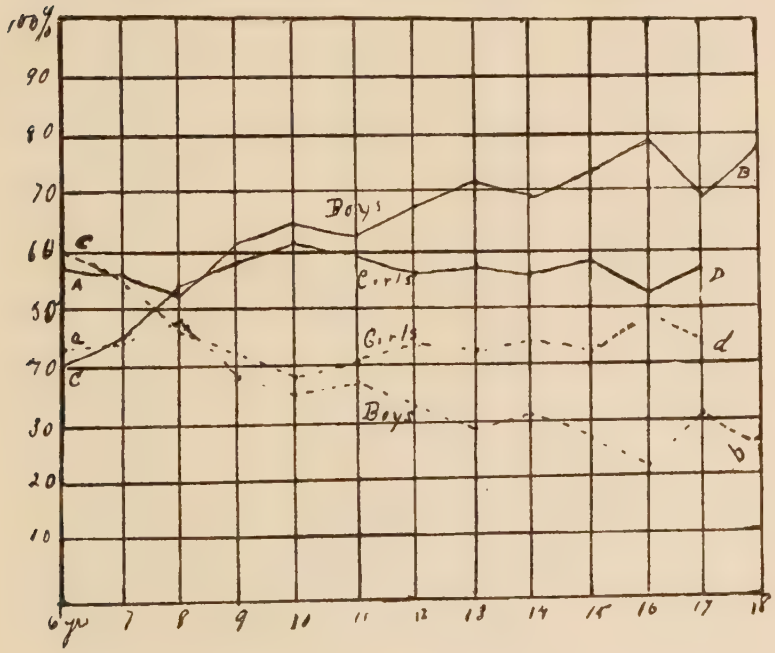
[1] Wundt: Outlines of Psychology. p. 293.
[2] James: The Principles of Psychology. New York, 1890. Vol. II, p. 526.

it only changes the emphasis. Such a view does not consider the child simply as a child to be treated as a child; but as a member of the human race who has already begun to take his place in the world where he lives. The school is no longer a mere drill-room—a vestibule to the life which is to follow; but life has already begun there, under conditions very similar to those which affect the teacher and the parent. In adult and child alike there is the psychic life struggling for expression, and in every expression reacting upon the psychic centers, and modifying them. The character of this expression is of the greatest importance, nor is it changed when the child has left the public school; whether he cares for knowledge or not, he will be a learner throughout his entire life.

With this general statement of the function of amusements as at once the expression and the means of psychic development, and without attempting to differentiate the explanation of the play activity from that of general activity, we will return to the consideration of the *characteristics of children's amusements* as seen in these returns.

The main classification was based on the motor development. The list of amusements calling for active physical exertion is

*Amusements tending toward Physical Development.*



so prominent as to lead to the placing first among the prominent characteristics *the desire for physical activity*. Man has this in common with all animal life. The foregoing chart indicates relatively the strong ascendency of the physical exercises over all other forms of amusement; at every age after the ninth year it is represented as almost 2 to 1, and in the sixteenth year rising among the boys to 4 to 1.

The proportion which those amusements tending chiefly toward physical development bear to all other amusements, is shown for each year from 6 to 18 by curves A B and C D. Curves a b and c d are the respective complements of A B and C D, and show the relative proportion of all other amusement.

From another standpoint the same characteristic is brought

## The Twenty-Five Leading Amusements.

*Total, 1,000 Boys, 929 Girls.*

| | BOYS. | BOYS. | | GIRLS. | | GIRLS. | GIRLS. | | BOYS. | |
|---|---|---|---|---|---|---|---|---|---|---|
| | BOYS. | Mentioned by | Favorite with | Mentioned by | Favorite with | GIRLS. | Mentioned by | Favorite with | Mentioned by | Favorite with |
| 1 | Ball, | 679 | 241 | 409 | 67 | Dolls, | 621 | 356 | 39 | 6 |
| 2 | Marbles, | 603 | 115 | 130 | 21 | Sled, | 498 | 69 | 555 | 110 |
| 3 | Sled, | 555 | 110 | 498 | 69 | Jump Rope, | 480 | 60 | 13 | 1 |
| 4 | Skates, | 538 | 168 | 412 | 113 | Tag, | 442 | 93 | 356 | 73 |
| 5 | Football, | 455 | 157 | 1 | | Hide and Seek, | 427 | 132 | 241 | 74 |
| 6 | Tag, | 356 | 73 | 442 | 93 | Skates, | 412 | 113 | 538 | 168 |
| 7 | Relievo, | 336 | 126 | 194 | 48 | Ball, | 409 | 67 | 679 | 241 |
| 8 | Hockey, Polo, Shinney, | 313 | 53 | 8 | | Play House, | 365 | 54 | 59 | 5 |
| 9 | Checkers, | 277 | 87 | 189 | 34 | Jackstones, | 341 | 63 | 28 | 2 |
| 10 | Hide and Seek, | 241 | 74 | 427 | 132 | Play School, | 257 | 32 | 69 | 1 |
| 11 | Wagon, Express, | 188 | 35 | 7 | | Doll Tea Set, | 242 | 73 | 8 | |
| 12 | Dominoes, | 185 | 42 | 133 | 26 | Doll Carriage, | 233 | 80 | 5 | |
| 13 | Top, | 176 | 28 | 11 | | Relievo, | 194 | 48 | 336 | 126 |
| 14 | Play Horse, | 166 | 26 | 47 | 3 | Checkers, | 189 | 34 | 277 | 87 |
| 15 | Cards, | 163 | 34 | 151 | 51 | Hop Scotch, | 154 | 21 | 16 | |
| 16 | Bicycle, | 160 | 78 | 86 | 45 | Cards, | 151 | 51 | 163 | 34 |
| 17 | Snow Balling, | 123 | 14 | 98 | 3 | Croquet, | 148 | 52 | 62 | 3 |
| 18 | Swimming, | 119 | 26 | 15 | 2 | Dominoes, | 133 | 26 | 185 | 42 |
| 19 | Kite, | 107 | 5 | 12 | | Marbles, | 130 | 21 | 603 | 21 |
| 20 | Black Tom and Black Jack, | 102 | 26 | 97 | 14 | Leaves, | 112 | 6 | 75 | 2 |
| 21 | Horse Cobbles, | 88 | 5 | 7 | | Hoop, | 110 | 14 | 71 | 3 |
| 22 | Books, Reading, | 87 | 7 | 108 | 22 | Books, Reading, | 108 | 22 | 87 | 7 |
| 23 | Fishing, | 80 | 19 | 7 | 1 | Flowers, | 102 | 1 | 32 | 1 |
| 24 | Boat, | 78 | 18 | 27 | 4 | Drop the Handkerchief, | 101 | 11 | 22 | 2 |
| 25 | Leaves, | 75 | 2 | 112 | 6 | Snow Balling, | 98 | 3 | 123 | 14 |

out in the Table of the Twenty-Five Leading Amusements (p. 226) 9 out of the first 10, 17 out of the first 25, and 39 out of the 50 amusements mentioned the greatest number of times by the boys, are from this class; while from among the girls 6, 15, and 32 amusements belong respectively to this class.

Closely associated with the pleasure in physical exercise pure and simple, is that in the *development and exercise of skill.* It enters nearly all competitive games, where the conscious desire of mastery is likely to be the strongest motive, as seen in the little girl of eleven who liked to play tag best because she could "run fastest." It is one of the most prominent features in many athletic exercises, as in walking stilts and skating; also in games requiring manual dexterity, as marbles, and ball; it appears as mental skill in cards and puzzles. Every child likes "to make something." The wise direction of this instinctive desire, to accomplish something and to receive credit for it, is one of the strongest motives to which a teacher can appeal in guiding a pupil:

"With skill
Goes love to show skill for the sake of skill."

Akin to this characteristic is the *desire of emulation.* Eight of the first 10 amusements of the boys, 15 of the first 25, and 30 of the first 50 are of a distinctively competitive character.

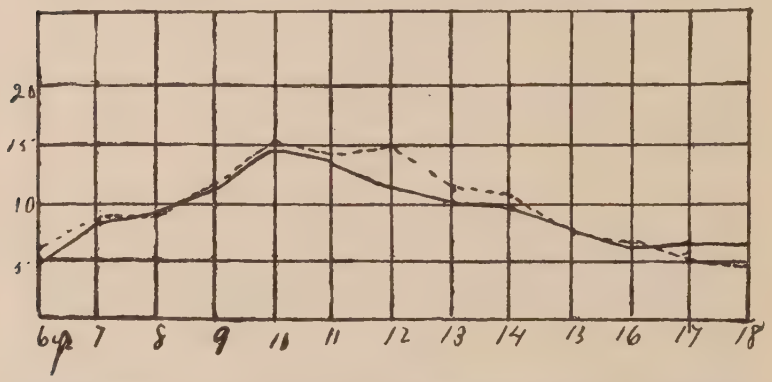
If anything is needed to supplement general observation on the child's pleasure in the society of others, it will be enough for the present to call attention to the fact that many of the amusements and most of the games mentioned require the participation of several persons. This is particularly true of the common ring games, games of chase and parlor games, and of most dramatic games. The reader will recall from his own experience the increased pleasure derived from the bicycle when he is not compelled to ride alone. However, we shall see later on that this is not an essential characteristic of the child's amusements at all ages; in fact, that in his desire to satisfy his curiosity, or his desire to realize his mastery over some obstacle, or to create something, the child becomes oblivious to all except the immediate task before him. Hence there is a long list of toys and objects, used either as toys or other means of passing away time, where the social instinct seems entirely in abeyance. The toy makes for individual development, the game for social.

*The love of dramatic expression* is most marked in the many make-believe games, and in the traditional song games of early childhood; in many games of chase in which the children become bears, lions, Indians or policemen; in most toys, *e. g.*, the doll and toy horse; in the animistic use of many objects, as flower babies, and pebbles used as animals.

## Effect of Age.

Thus far the discussion has been of children *en masse*, with little distinction between the child of six and the young man of fifteen, and without regard to the different stages of development. Such treatment is almost inevitable in a study of this kind, but a few curves showing the general tendencies in children's amusements at different ages can be presented. Is there a play age? A time at which the child is more devoted to play than at any other age? The Curve of Interest in Traditional Amusements is a partial answer to this question.

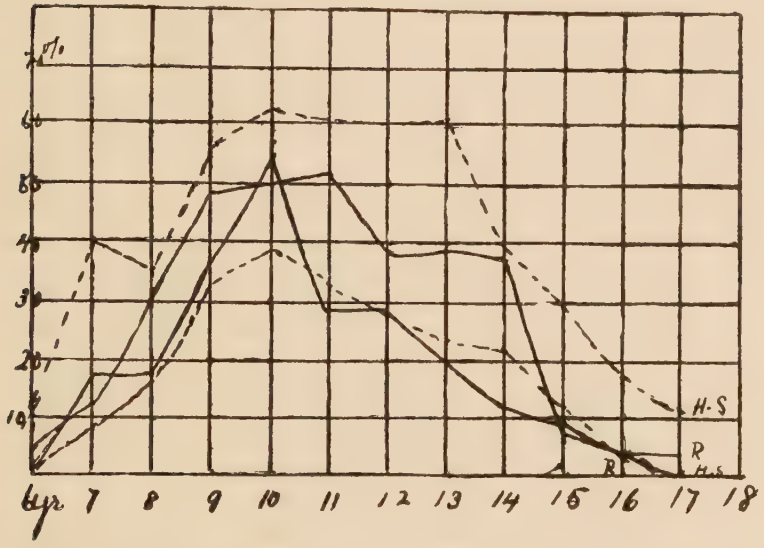
*Curve of Interest in Traditional Amusements.*




The basis of this curve is the average number of different amusements mentioned by the children at each age. Thus the children of six and seven mention on an average only five or six different amusements, but those of ten and eleven mention nearly fifteen. It is possible to give several interpretations of this. Were it not for the constant fall after the twelfth year, the form of the curve might be explained as due to increased facility of expression. There is still the possibility that the rise at nine and ten may in part be so explained, and the later fall may be due to the self-conscious restraint at the dawn of adolescence; but more probably it indicates, though somewhat vaguely, the period in which games predominate. From the eighth to the fourteenth year the average child knows more and plays more of the common traditional games than at any other period of life; and between ten and eleven interest in these is at its highest limit. Those who know from observation how fully the time of younger children is occupied with purely spontaneous play may at first question this curve. Let there be no misunderstanding; it does not say that the general play impulse culminates here, but that at this time the interest

in traditional games is strongest. The curves for Relievo and Hide and Seek, characteristic games of this period, indicate more specifically the nature of these games and the relative

*Curves for Relievo and Hide-and-Seek.*



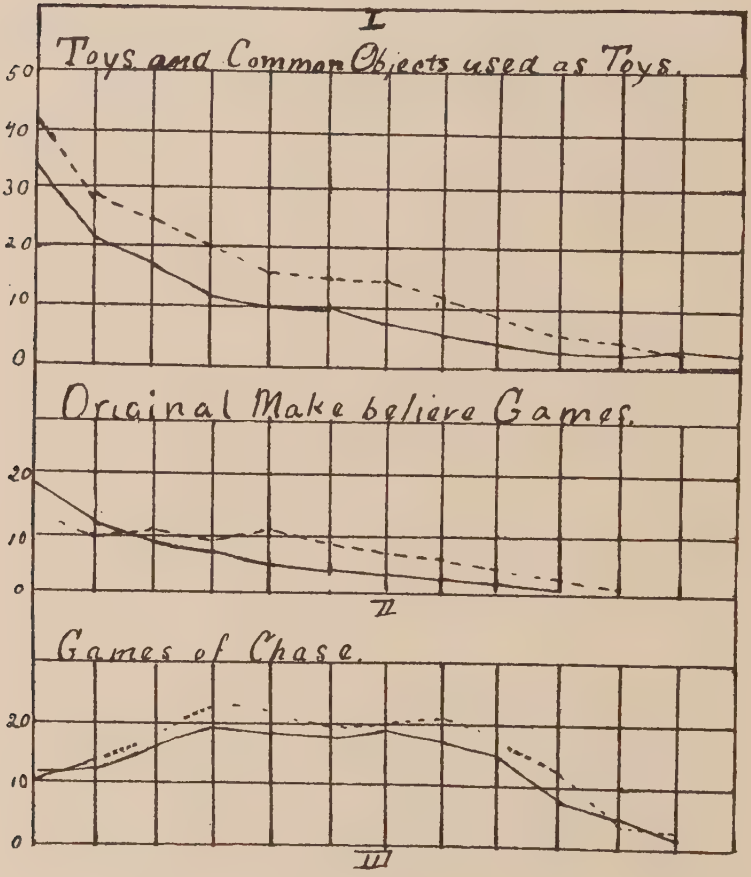

interest in them at different ages. Thus only eight per cent. of the boys of seven and eight years of age mention Hide and Seek, but fifty-five per cent. mention it in the tenth year.

A glance at the charts of Relative Interest at different ages will show in a general way that this is also the age at which different interests meet and blend; here for the last time the toy interest is considerable; it is the beginning of extreme interest in contests; it is the center of interest in games of chase.

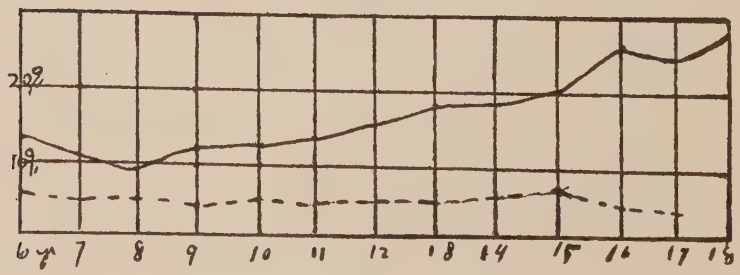
The Curves of Relative Interest trace the growth of special interests, indicating the nascent periods in a number of groups. Thus the Curve of Games of Chase shows that only eleven per cent. of all the amusements mentioned by the boys of six years are of this character, but at nine years they amount to over nineteen per cent., and at sixteen they have fallen to less than four per cent. The particular toys and games included in the groups characterized by these curves may be learned by consulting the corresponding headings in the list of amusements already given. See pp. 217–222.

Three natural divisions in the school life of the child may be made in accordance with the relative predominance of different characteristics in his amusements. In the first period from the

*Curves of Relative Interest.*

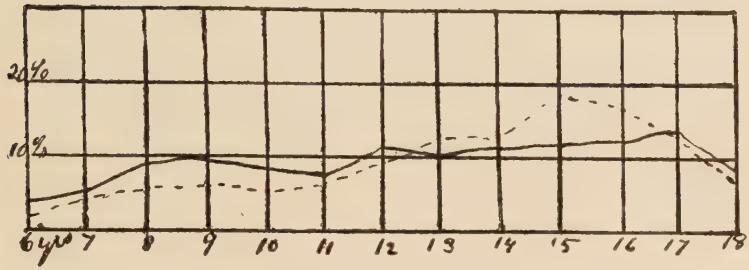



*Ball Games.*



CURVES OF RELATIVE INTEREST.—Continued.

*Card and Table Games.*




6th to the 9th year, the greater part of the child's amusements center about some object, used symbolically or as a means through which to exercise the childish impulse for activity. In the second period, from 9 to 13 years, the favorite amusement is some game calling for vigorous exercise of the whole body as seen in the curve of Games of Chase; though, as already said, it is also the period of the greatest diversity of interests. In the third period, from the 14th year onward, the creative spirit prevails—that spirit which compels the child to do something, to become something. Most of the amusements of this period are contests, and for the first time the co-operation of a number to secure a definite end, or promote a common cause, becomes a common characteristic; while the majority of the remaining amusements center about some result to be attained.[1]

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[1]Dr. Gulick: *Some Psychical Aspects of Physical Exercise.* Popular Science Monthly, Vol. LII, pp. 793–808 (Oct.,'98). In this very careful study Dr. Gulick makes the five following divisions in the play life of the child:

1. Babyhood, 1–3 years.
2. Early Childhood, 3–7 years.
3. Childhood, 7–12 years.
4. Early Adolescence, 12–17 years.
5. Later Adolescence, 17–23 years.

Of the first two periods he says: "Children before seven rarely play games spontaneously. They do sometimes under the stimulus of older children or adults." In the third period "these games are almost exclusively *individualistic* and *competitive*, forming a strong contrast with the games of early childhood." In the period of *early adolescence* "two elements predominate: (1) That the plays are predominately team games, in which the individual is more or less sacrificed for the whole, in which there is obedience to a captain, in which there is co-operation among a number for a given end, in which play has a programme and an end. The second characteristic is, the period, with reference to its place, seems to be all of savage outdoor life—hunting, fishing, stealing, fighting, hero worship, adventure, love of

In the period from 6 to 10 years, and earlier, all manner of toys are used by the child in his amusements. Not only the toys which are bought or made for him, but every conceivable thing is utilized by him to give expression to his impressions of the world about him. Or perhaps one should say that, especially in the earlier part of this period, until about the ninth year, the toys and objects used form a means of comprehending; they are for the child organs of apperception; without the use of these crude symbols many of the simplest facts of life might never become a part of his earliest and most important stock of ideas experienced. The young child is a constant investigator of the phenomena about him, and is ever writing up the results of his empirical investigations in the language of his plays. The symbolic characters of this language may be a doll, a cart, a flower, a stick, a coal hod, a broom. Father's boots may be dear little babies, expressing all phases of early psychic life, and over which the young mother must exert a most watchful care, or they may typify a pair of prancing bays which attracted her attention earlier in the day. One young girl, beginning with her entrance into grade I, has continued to reproduce her school life by means of buttons through all the eight grades. In the buttons which represent the pupils she sees nearly the same children for each grade, but there is a new teacher each year. In such plays the imitation of the teacher is often reported to be almost perfect. It is a study in psychology, and from the child's standpoint might be termed adult study.

It has already been stated that the toy is a means of individual development. Does any one recall an active child who was ever content to remain long without some object in its hands?

With most of our kindergartens conducted on the principle of mutual co-operation, and in the face of the many facts showing that from earliest infancy the child delights in and craves the society of others, both of adults and children, but especially of others of its own age, it is rather venturesome even to suggest that this is not the period for extended co-operation.

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animals, etc. This characterization obtains more with boys than with girls." . . . . .

"Comparing now the three major groups—early childhood, later childhood, and adolescence—it appears that the plays of early childhood are individualistic, non-competitive, and for the accomplishment and observation of objective results. The plays of later childhood are individualistic, competitive, involve active muscular co-ordination and sense judgment. The plays of adolescence are socialistic, demanding the heathen virtues of courage, endurance, self-control, bravery, loyalty, enthusiasm, and the savage occupations of hunting, fishing, swimming, rowing, sailing."

However, the individual element is the prominent feature of the amusements of children until the eighth or ninth year, when for the first time those plays requiring the active co-operation of many individuals assume prominence.

The original dramatic games cannot well be classed as belonging to any one of the three periods mentioned, but rather form a connecting link between the first and second. If a function of the toys be to facilitate the apperception of one's more immediate sensuous environment, that of these games and of many of the dramatic games of tradition is to facilitate the assimilation of a class of ideas, wider in range and more imaginative; they lead the growing mind to new and rich fields. The catastrophe of London Bridge, and other traditional games, introducing titled personages, delight each new generation. Playing in an American city, the little Queen of France daily entertains the Queen of England or makes a royal visit to the court at Windsor. The broad range of this make-believe interest is probably between the years from 9 to 12, yet within the narrower sphere of its immediate environment the younger child imitates to an equal extent. As Miss Frear has shown so clearly in charts II and III of her article on Imitation, in the early period the child imitates the "actual things," later the "idea."[1]

The characteristic games of the second period call for vigorous physical exercise; thus the games of chase, in which running is the center of interest, formed twenty per cent. of all the amusements mentioned by these children between nine and twelve years of age. That this tendency to much exercise at this period has a very important relation to growth there can be no doubt.[2] That the maximum of interest in such games corresponds to the lowest average in the tables of growth, as worked out by Kline and others, challenges the careful consideration of those competent to decide upon the effect of so much exercise at this period. "Increased action of the respiratory and circulatory systems is the most important physiological effects produced by muscular exercise."[3] This statement sums up about all that can be said at present of the effects of physical exercise. These effects, as worked out by Parkes, refer to the adult, and it is very probable that the results of this increased action, which would be injurious to an adult, might be beneficial if occurring in a growing child. Bierent[4] calls attention to the great increase in the volume of the heart

[1] *Ped. Sem.*, Vol. IV, p. 383.
[2] *Ped. Sem.*, Vol. V, pp. 412-416.
[3] Ralfe: Exercise and Training. N. Y., 1894. p. 30.
[4] Bierent: La Puberté chez l'homme et chez la femme. Paris, 1896. p. 161.

and in the richness of the contractile fibers of the heart at puberty, and to the fact that there is never, properly speaking, hypertrophy of the heart at this period; quoting Beauis, he also states that the heart beats at ten years number 91 per minute, and at fifteen years has fallen to 82. There is also a slight decrease in the normal number of respirations during these years. Thus this is the period of great development of the heart and respiratory organs, as well as the period of those activities which stimulate the heart to the greatest intensity; and yet apparently without the evil results certain to follow over-stimulation of the heart of the adult. We should have called this a period of violent exercise—and such its exercise most certainly would be for an adult, whose heart would soon be severely taxed were he to engage in some of the exciting games of tag common among boys at this age—had we not observed the promptness with which these boys respond to the feelings of fatigue. This instinctive knowledge of when he has had enough, and readiness to yield, is undoubtedly connected with that other virtue, here termed variety of interests, commonly called inattention. Combined, these are undoubted monitors of health and right development, guarding alike against excess in physical exercise and deteriorating monotony in school work. The person who attempts to get much physical labor from one of these boys discovers that he is lazy. The school teacher finds the grades in which boys of this age are most numerous, the most restless of all.

This period of extreme variety and vigor in physical exercise, and of rapidly flitting attention, is the period immediately following that at which the brain has ceased from its rapid early growth, having already by the eighth year reached its approximate limit of weight.[1] During these years, according to the neurologists, the important phase in the development of the brain is the increase in association fibers and the further medulation of these fibers. This furnishes a plausible explanation of the function of these games and a reason for their diversity. May it not be that this great diversity of interests, this restless, roaming attention, this craving for something new, this extreme desire to be able to perform some special feat of skill—all of which are so strong at this period—may not this be Nature's way of guarding against a too early cramping of interest along few lines, her way of seeing that a broad general development is assured by providing numerous and varied experiences at this period of the development of association fibers? If this be Nature's plan, then it has been most severely sinned against by those who have prepared the courses of study in

[1] Donaldson: Growth of the Brain. N. Y., 1895. p. 107.

our schools, for the fourth and fifth grades are the ones, beyond all other, most likely to be dry and uninteresting.

There is one other feature of this period which, although already mentioned, must not be left without special notice; it is the foundation for social co-operation, slowly laid by these games. Here are the beginnings of social life, of true citizenship, of combined independence and mutual dependence. In these varied games of chase, etc., are prominent those incentives to close attention, prompt and accurate action and self-control to a marked degree. There, too, is the necessity of many taking part, and hence the frequent and often forced recognition of the rights of others, of a justice with hard and fast laws which may not be lightly disregarded. The constant bickering, the petty quarrels characteristic of the play of children from nine to twelve, trying parents almost to despair, and convincing disinterested persons that "such quarrelsome brats" must be beyond hope, are but the parliamentary debates of early legislators. As yet, however, there is no true social co-operation. There is little of the general combined action, definitely continued to attain a fixed end. Even those games in which an adult sees the possibility of great co-operative action are played by boys below the teens with little attention to the results to be obtained by combining efforts, but are studded with feats of individual prowess; every player strives to be the star. Yet in this struggle of individuals are conditions forcing mutual consideration and preparing for the more definite co-operation of later years.

Our curves show that as late as the ninth year nearly 20% of the amusements of these children was with common toys or with objects used as toys; that during the next four years about the same per cent. of running games occurred. The further characteristic of these earlier periods having been traced, a closing study of the third period is made. After the twelfth year the interest in ball games rises rapidly, from 15% at 12 years to 26% at 16 years; along with this grows a corresponding interest in cards. This statement means that a third or more of all the amusements of these boys just entering their teens, are games of contest—games in which the end is in one way or another to gain an advantage over one's fellow—in which the interest is in the struggle between peers. In foot-ball, for example, there can be no doubt of the pleasure derived from the physical activity which sends the blood coursing through one's veins, giving rise to feelings of a vigorous self, to a heightened consciousness of one's own powers; nor is this consciousness of power wanting in a game of cards; nevertheless it is *the result to be attained*, ever being attained as the contest proceeds, that centers the interest in the games. At this early

stage in life the end must not be too far distant, the struggle must be ever present. Later on one may find delight in the severe preliminary practice which prepares him to win the later contest, or even in the strokes which are laying the foundation of his later success on the tennis court. Yet for the younger boy all this is drudgery unless the contest is ever present;—on the opposite side of the net must be some one to beat.

The beginnings and growth of this spirit of co-operation is beautifully shown by a comparison of the boys' curves for hide and seek and relievo (p. 229). The latter is played by two sides, and hence has slightly more of the features of co-operation, though in many respects the games are of a similar nature. Note the culminating point of the upward rise in each at about ten years, followed by the rapid decline of the first, and the continued interest in the second, due undoubtedly to the appeal to this growing delight in contest.

A look backward at the Curve of Interest (p. 228) gives an additional explanation of the downward drop after 10. At 10 years an average of 14 different amusements are mentioned; at 16 not half that number. This is the natural consequence from the class of games played; the more remote the end to be attained in a game, the more confined to it will be the attention, if any interest exists, and hence the exclusion of many games heretofore quite common. Thus certain games appear as powerful aids in the development of the ability to concentrate one's attention, to specialize.

## Effect of Sex.

The charts and curves have already brought out distinctions between the amusements of the sexes. A résumé will make them clearer.

Nearly 40% of the 700 amusements of these children are common to both sexes, although about 30% are mentioned by each sex alone; for the most part the latter are games played but rarely.

A comparison of the leading games of the sexes calls attention to the greater variability of the male, a fact so frequently noted in the literature of evolution.

Amusements mentioned by fifty per cent. or more: Boys,—Ball, Marbles, Sled, Skates; Girls,—Dolls, Sled, Jumping Rope.

By 40% to 50%: Boys,—Football; Girls,—Tag, Hide-and-Seek, Skates, Ball, Play House.

By 30% to 40%: Boys,—Tag, Relievo, Hockey; Girls,—Jackstones.

By 20% to 30%: Boys,—Checkers, Hide-and-Seek; Girls,—Play Sol, Tea Set, Doll Carriage, Relievo.

Thus only 10 games are mentioned as commonly played by at least 20% of the boys, while among the same proportion of girls 13 games are common. This difference is continued as other games are added, 10% of the girls having 25 amusements in common, while the same number of boys have only 20. This indicates that the girls have a larger repertoire of amusements that are used regularly. Although several of the groups of amusements which suggest in-door life, seem at first to indicate the opposite, a careful study of the data shows that the boys are less conventional. Thus the proportion of toys to other means of amusement is much smaller, especially after the ninth year, with the boys than with the girls, but the girls use very generally such toys as tea-sets and doll carriages, which together with dolls, aid their imagination in the reproduction of domestic life; while the boys, though they use no toys so generally, mention a greater variety. Again what is true of toys is also true of their imaginative games. A very large proportion of girls will play a few games dealing with local life, as playing house, or school, or playing parties; while fewer boys play any one game, but their games are more numerous and deal with a wider environment.

Forty per cent. of all the amusements mentioned were indulged in by both sexes. This element of common interest is seen in the general correspondence between the sex curves in the different charts. There are exceptions, however, as in the curve where the girls are made to appear to indulge in toys to a much greater extent than the boys, and in the curve of Ball Games which the reader might interpret as showing that the girls are lacking in the spirit of emulation. The first has already been explained as due to the doll interest, so predominant in girls. The second, though showing that the girls do not indulge to so great an extent in these contests of physical strength, does not negative the statement already made, that the third period for boys and girls alike, is marked by contests in amusements. The curve for cards clearly traces the growth of this element in the character of the girls. Still this spirit of stubborn contest, delights in the strife for mastery, is more characteristic among the boys, and is illustrated by the game of chess, and by the curves for Hide-and-Seek and Relievo (p. 229). Chess, a game requiring close application throughout, and attention from the start fixed on a definite end, is mentioned by twenty-five boys; but only one girl of nearly one thousand included it in her list. In comparing the curves just mentioned, it is found that the girls continue their interest in hide-and-seek, as they seem to in all distinctively running games, long after

that of the boys has been drafted off to more vigorous and general contests.[1]

Dr. Ellis in his extremely suggestive article on Dolls[2] has clearly indicated their wide use and great value in the psychic development of the child. He also showed that doll playing was not confined to girls alone. But with him "dolls" had a much wider connotation than with these children who have listed "dolls" among their playthings. In the present study "dolls" must be considered as referring only to those toys commonly so called. Accordingly a very small proportion of the boys of school age are found acknowledging that they "play dolls," though the number reported is doubtless far too small, as there are obvious reasons why the average boy would not confess to this amusement. Many, however, speak of playing dolls at an earlier age, generally prior to their admission to school, when the doll was probably a common toy with them.

## Effect of Nationality.

The child has the same general needs in his growth from whatever race he springs. On the whole, the following statement is true: the general character of the games played by these children of differing nationalities and diverse classes in society were the same whatever stage of their development was selected. This constantly recurring similarity was repeatedly brought to the attention of the writer during his work on the returns, and was to him an incontestable proof of the genuineness and accurateness of the answers.

The child, be he American, Swede, Irish, French or Jew, at the time when he enters school still clings to his toys; at nine, ten and eleven years of age he expands his chest, strengthens his heart, and gains a general control over the movements of his whole body, as he avoids capture or secures his prey in his games of chase. At the same time his active and unrestrained imagination will cause it to be more than a game of tag for him; he will be transformed for the time being into the character, human or animal, which the particular game calls for. The observer of the games at this period cannot fail to notice what a large proportion call for dramatization in some form. Later, whatever his nationality, the mere activity, the exercise in itself, will not be enough; at the end of it there must be something to show, some result, some object constantly in

[1] Groos states that those games in which is an active contest between sides, and necessarily a stricter subordination to law, are played more by the male sex; and he suggests that the social capacity of the American women is highly developed because they contest in all games freely with the boys.—*Die Spiele der Menschen*, p. 438.

[2] *Ped. Sem.*, Vol. IV, p. 129.

view, else he considers his activity thrown away. Now is the time to interest him in *something*—to form permanent interests.

Emphasis has been properly placed upon this general correspondence; but on that account no one should think that there are not important differences, due at least to the traditional environment with which birth invests children, even if the difference be not rooted in the national character. The playthings and games of the parent are an important element in determining those of their children; and as promoters and transmitters of amusements the parents are second only to the children themselves. The returns as tabulated showed that fewer toys were mentioned by the Swedish children than by those of American parentage; and the writer was told by teachers acquainted with both Swedish and American homes that fewer toys are found in the former than in the latter, this difference being very noticeable. A singular case in point is found in the returns under the heading of "Cards." In one school where there were 237 girls, for the most part of American parentage, 48 reported that they played cards, and 18 of these, an unusually large proportion, reported "Cards" as a favorite; but in two other schools in which the great majority were Swedish, although the total number of girls was 287, only two mentioned cards, and these two were Irish. The returns, however, indicate that the Swedish children more often made toys for their own use than did the American; whence it may be inferred that paucity of toys in the Swedish home is due more to parental custom than to childish instinct. The returns also showed that the Swedish children indulged in the games calling for active physical exercise to a much greater extent than any of the other nationalities represented, though the environment of Worcester children encourages games of this character, and their proportion relative to other amusements is very large among all classes of children in this city. This characteristic is prominent among the games of the Swedish girls as well as boys; with them running games of all kinds, skating and "sliding" are prime favorites. This great enjoyment of physical activity accords well with the usually accepted characteristics of northern races, and especially of the Scandinavian in its own peninsular.

I have to thank Miss Foley, the superintendent of physical culture in the city schools, for one fact of great interest. At the time these data were being gathered, she was conducting the very practical experiment of introducing common games into some of these same schools in the place of the ordinary physical exercises. In the course of her experiment she found that the same games were not equally successful in all schools; and that in one school, in which the children were largely of

American parentage, the spirit of rivalry, an oppportunity to beat, was necessary to the successful introduction of any game. This spirit of rivalry is characteristic of cards, just mentioned as an example of a distinction between American and Swedish games; and in all games of this class the distinction holds good between the nationalities;—more rivalry among the Americans, among the Swedes more vigorous physical exercise.

### Effect of Locality and Season.

Comparing the tables of the leading amusements in Worcester (p. 226) and Brooklyn (pp. 240–242), and of leading toys in Westfield, a general agreement is found in the order and relative percentage of similar games; thus with the boys ball is first in both the former places, and sledding and skating are third and fourth respectively, while checkers is ninth on all three lists; the sled also is second with the girls from the first two places, and checkers occupy the fourteenth position.

On the other hand hockey (shinney) stands much higher on the Worcester list, and relievo is not found at all among the leading games[1] of Brooklyn boys, though extremely popular in the former city. Also the list from the Brooklyn girls give us a surprise as we read "dolls" down into the fifth place, jump rope, sled, skates and jackstones preceding, nor do games of chase appear to be so great favorites, and cards are played more. These are, as will be seen, only typical differences, such as will be found on comparing any two localities, and they illustrate two things which largely determine the free amusements of any community: (1) the effect of tradition, (2) and that of physical environment.

### Leading Amusements.

*Boys.—Brooklyn. Total number, 205.*

| | | Mentioned by | Favorite with |
|---|---|---|---|
| 1. | Ball, | 151 | 68 |
| | (Baseball alone), | 101 | 53 |
| 2. | Marbles, | 109 | 15 |
| 3. | Sled, | 100 | 9 |
| 4. | Skates, | 89 | 17 |
| 5. | Foot-ball, | 73 | 16 |
| 6. | Top, | 64 | 7 |
| 7. | Tag, | 51 | 5 |
| 8. | Snow Balling, | 48 | 5 |

[1] "Ring Relievo," however, is mentioned and described by Stuart Culin in the *Street Games of Boys in Brooklyn, N. Y.* (See *Journal of American Folklore*, Vol. IV, pp. 221–237.) This is the same game, although not played exactly as it is by the boys in Worcester.

*Boys.—Brooklyn.—Continued.*

| | | Mentioned by | Favorite with |
|---|---|---|---|
| 9. | Checkers, | 45 | 15 |
| 10. | Pass Walk, | 40 | 5 |
| 11. | Hide-and-Seek, | 39 | 5 |
| 12. | Sleigh Riding, | 37 | 5 |
| 13. | Prisoner's Base, | 36 | 2 |
| 14. | Snap the Whip, | 33 | 1 |
| 15. | Swimming, | 28 | 9 |
| 16. | Dominoes, | 27 | 2 |
| 17. | Puss-in-the-Corner, | 27 | 1 |
| 18. | Play Horse, | 24 | 6 |
| 19. | Bicycle and Velocipede, | 23 | 6 |
| 20. | Lotto, | 22 | 4 |
| 21. | Wagon, | 20 | 4 |
| 22. | Kick the Can, | 19 | 2 |
| 23. | Kites, | 19 | 0 |
| 24. | Shinney, | 18 | 0 |
| 25. | Messenger Boy, | 17 | 8 |

All of these boys were between 8 and 16 years old, the great majority between 10 and 15.

LEADING AMUSEMENTS.

*Girls.—Brooklyn. Total number, 223.*

| | | Mentioned by | Favorite with |
|---|---|---|---|
| 1. | Jump Rope, | 150 | 39 |
| 2. | Sled, | 131 | 14 |
| 3. | Skates, | 123 | 27 |
| 4. | Jackstones, | 121 | 33 |
| 5. | Dolls, | 117 | 60 |
| 6. | Tag, | 82 | 12 |
| 7. | Play House, | 79 | 22 |
| 8. | Hide-and-Seek, | 67 | 19 |
| 9. | Bicycle and Tricycle, | 58 | 25 |
| 10. | Roller Skates, | 81 | 15 |
| 11. | Play School, | 50 | 15 |
| 12. | Dominoes, | 49 | 15 |
| 13. | Doll Carriage, | 48 | 17 |
| 14. | Checkers, | 47 | 7 |
| 15. | Ball, | 46 | 9 |
| 16. | Lotto, | 46 | 7 |
| 17. | Reading and Books, | 45 | 3 |
| 18. | Parchesi, | 42 | 10 |
| 19. | Sewing, | 36 | 3 |
| 20. | Croquet, | 33 | 11 |
| 21. | Messenger Boy, | 31 | 6 |

*Girls.—Brooklyn.—Continued.*

| | | Mentioned by | Favorite with |
|---|---|---|---|
| 22. | Old Maids, | 25 | 2 |
| 23. | Sleigh Riding, | 23 | 2 |
| 24. | Bean Bag, | 21 | 0 |
| 25. | Play Store, | 19 | 1 |

These girls were between 9 and 16 years of age, the majority between 10 and 13.

THE FAVORITE TOYS.

*Boys.—Westfield, Mass.*

| | | *Total, 701.* | *29* | *58* | *80* | *77* | *118* | *118* | *102* | *90* | *34* | *15* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 1. | Top, | 297 | 12 | 20 | 26 | 30 | 56 | 53 | 38 | 39 | 18 | 5 |
| 2. | Ball, | 260 | 7 | 15 | 29 | 20 | 46 | 44 | 48 | 31 | 13 | 7 |
| 3. | Marbles, | 227 | 4 | 10 | 15 | 20 | 45 | 43 | 39 | 34 | 13 | 4 |
| 4. | Wagon, Exp'ss, | 150 | 8 | 12 | 20 | 24 | 32 | 21 | 22 | 7 | 2 | 2 |
| 5. | Football, | 114 | 1 | 3 | 10 | 11 | 15 | 27 | 22 | 17 | 7 | 1 |
| 6. | Bicycle, | 95 | 3 | 5 | 4 | 7 | 17 | 22 | 17 | 12 | 7 | 1 |
| 7. | Drum, | 84 | 4 | 8 | 8 | 11 | 18 | 16 | 8 | 8 | 1 | 2 |
| 8. | Skates, | 76 | 1 | 2 | 11 | 4 | 16 | 18 | 13 | 9 | 2 | |
| 9. | Checkers, | 75 | 1 | 2 | 6 | 5 | 10 | 16 | 7 | 12 | 15 | 1 |
| 10. | Gun, | 74 | 1 | 2 | 6 | 3 | 19 | 16 | 17 | 7 | 2 | 1 |
| 11. | Cars, Engine, | 71 | 2 | 10 | 19 | 11 | 12 | 6 | 5 | 5 | 1 | |
| 12. | Sled, | 65 | 2 | 2 | 9 | 4 | 14 | 15 | 11 | 7 | 1 | |
| 13. | Tool Chest, Tools, | 51 | 1 | 4 | 5 | 7 | 14 | 3 | 6 | 9 | 1 | 1 |
| 15. | Bat, | 49 | | 1 | 4 | 6 | 13 | 8 | 10 | 3 | 2 | 2 |
| 16. | Boats (toy), | 48 | 1 | 4 | 5 | 7 | 14 | 3 | 6 | 9 | 1 | 1 |
| 17. | Horse (toy), | 45 | 6 | 2 | 13 | 7 | 6 | 7 | 4 | | | |
| 18. | Books, | 34 | 2 | 0 | 4 | 5 | 8 | 7 | 3 | 3 | 1 | 1 |
| 19. | Cards, | 33 | 1 | | 1 | 2 | 6 | 7 | 12 | 3 | | |
| 20. | Blocks, | 31 | 1 | 5 | 3 | 4 | 3 | 3 | 7 | 5 | | |
| 21. | Kite, | 29 | | | | 7 | 5 | 7 | 4 | 3 | 2 | 1 |
| 22. | House, | 27 | 2 | 5 | 3 | 2 | 3 | 1 | 4 | 4 | 2 | 1 |
| 23. | Dominoes, | 24 | | 3 | 4 | 2 | 3 | 5 | 4 | 3 | | |
| 24. | Dog, | 24 | 2 | 3 | 3 | 3 | 3 | 4 | 4 | 2 | | |
| 25. | Puzzles, | 23 | | | 1 | 1 | 6 | 4 | 6 | 2 | 2 | 1 |

THE FAVORITE TOYS.

*Girls.—Westfield, Mass.*

| | | *Total, 808.* | *35* | *65* | *102* | *108* | *104* | *121* | *128* | *100* | *24* | *19* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 1. | Dolls, | 626 | 30 | 61 | 97 | 98 | 90 | 102 | 92 | 44 | 6 | 4 |
| | (Paper Dolls, | 89 | | 4 | 6 | 5 | 11 | 21 | 28 | 12 | 1 | 1) |
| 2. | Tea Set, Dishes, | 223 | 10 | 27 | 30 | 42 | 31 | 37 | 32 | 14 | | |

*Girls.—Westfield, Mass.—Continued.*

| | | | | | Mentioned by | | | Favorite with | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 3. Doll Carriage, | 181 | 5 | 18 | 27 | 34 | 36 | 24 | 31 | 7 | | |
| 4. Books, | 134 | 4 | 7 | 17 | 24 | 27 | 21 | 17 | 12 | 3 | 2 |
| 5. Top, | 125 | 5 | 10 | 22 | 17 | 12 | 19 | 16 | 15 | 2 | 2 |
| 6. Ball, | 119 | 1 | 10 | 11 | 17 | 21 | 17 | 26 | 16 | | |
| 7. Bicycle, | 69 | | 5 | 6 | 2 | 15 | 12 | 15 | 14 | | |
| 8. Sled, | 69 | | 3 | 7 | 5 | 17 | 11 | 14 | 11 | | 1 |
| 9. Jump Rope, | 68 | | 8 | 11 | 9 | 7 | 10 | 14 | 8 | 1 | |
| 10. Skates, | 67 | | 2 | 3 | 4 | 17 | 14 | 15 | 11 | | 1 |
| 11. Piano, | 62 | | 7 | 2 | 2 | 6 | 13 | 20 | 7 | | 5 |
| 12. Checkers, | 57 | | 1 | 8 | 4 | 9 | 7 | 17 | 13 | | |
| 13. Hoop, | 49 | 2 | 4 | 7 | 4 | 9 | 12 | 4 | 6 | 1 | |
| 14. Stove, | 49 | 1 | 6 | 9 | 9 | 8 | 8 | 4 | 4 | | |
| 15. Paint, | 45 | | 5 | 6 | 3 | 5 | 8 | 10 | 6 | 1 | 1 |
| 16. Blackboard, | 43 | 1 | 3 | 7 | 9 | 3 | 4 | 14 | 2 | | |
| 17. Dominoes, | 39 | 1 | 3 | 3 | 7 | 4 | 3 | 8 | 7 | 2 | 1 |
| 18. Doll's Bed, | 37 | 2 | 4 | 5 | 9 | 5 | 6 | 4 | 2 | | |
| 19. " Table, | 37 | 1 | 4 | 5 | 6 | 9 | 4 | 6 | 1 | | |
| 20. " Chairs, etc., | 33 | | 1 | 8 | 7 | 6 | 6 | 3 | 2 | | |
| 21. " Cradle, | 29 | 1 | 4 | 5 | 6 | 4 | 4 | 2 | 3 | | |
| 22. Blocks, | 29 | 2 | 8 | 4 | 3 | 4 | 3 | 3 | 2 | | |
| 23. Cards, | 29 | | 1 | 3 | 3 | 5 | 6 | 6 | 4 | 1 | |
| 24. Play School, | 25 | 2 | 2 | 5 | 6 | 1 | 3 | 6 | | | |
| 25. " House, | 24 | | 1 | 4 | 6 | 1 | 3 | 7 | 2 | | |

We have seen how parental influence was still a factor in determining the plays of the Swedish children of Worcester; here again is a most striking instance of a game, "relievo," nourished and developed until it is mentioned by a third of all the Worcester boys, and yet apparently played but little by the boys of Brooklyn, a little more than one hundred miles distant. But the interesting feature of it all is the substitution of games of the same class. In Brooklyn, Pass Walk and Prisoner's Base appear to be the substitutes for relievo, while general observation in Chicago and vicinity puts "Pomp, pomp, pull away" in its place.

One reason why shinney is three times as popular in Worcester as in Brooklyn, and that running games of all kinds appear to be more popular, is undoubtedly the exceptional inducements offered by the physical conditions of the former city; the many small ponds suitable for shinney are a constant invitation to the small boy with a pair of skates, and the innumerable vacant lots, covered with grass,—not yet the dirty dumping places so common in large cities,—have furnished Worcester, free of charge, an excellent system of small parks

for playgrounds.[1] The only regretable fact is that these are neither as frequent nor as grassy in the poorer neighborhoods, where exist the greatest need of them, and that they cannot be made permanent. These back lots and the broad, shady streets offer the choicest opportunity for indulging in running games of all kinds.

While tradition and environment may perhaps have helped to plaec two amusements, jumping rope and jackstones, always favorites with city girls, higher up in the Brooklyn list, one other factor not due to locality has had its influence on the relative position of "dolls" and "cards;" a large proportion of the Brooklyn girls were in the upper limit of "the doll age," or, speaking from the other standpoint, they were just entering "the age of card interest." Had equal numbers of the same age been taken, the similarity between the two lists would have been much closer.

The difference in the Westfield list is due in the main to the fact that it covers less ground than the others, being devoted to toys alone and giving greater emphasis to these. Hence are placed high on this list toys which are not found at all in the other two. Another reason why certain of these toys, as wagons, cars, and drums, occupy so high a position, is found in the relatively greater proportion of children below ten years of age. The very prominent position of the top among Westfield toys may be due to either of two causes: it may be one of those local toys which has become strongly rooted there, or the returns may have been taken when "tops were in." Probably both of these conditions existed, for the top has a very wide range in its relative popularity in different localities, and, like marbles, it comes and goes like an epidemic.

The returns from our syllabus give very general or indirect answers in regard to the influence of the seasons in determining the games played; but a few observations are perhaps worth recording. In notes taken by the writer in Chicago during the spring of 1898 the following occurs: "Sat., Mar. 6.[2] Went-

[1] G. M. West, in his article upon *The Anthropology of American School Children*, found in the proceedings of the *International Congress of Anthropology, Chicago, 1894*, makes the following statement, which is of suggestive interest in this connection: "The Worcester children are markedly above the average in stature, while the Toronto and Boston children are almost as markedly at the opposite extreme."

[2] On the 15th of February, 1899, the writer saw, for the first time of the season in Chicago, marbles, ball, and various tag games, but the conditions were peculiar; for fully a month the weather had been exceedingly cold, the thermometer frequently registering 15° or more below zero, and there was little or no snow on the ground. Suddenly, within twenty-four hours, there was a rise of about 70°. After a few days the temperature again dropped, and these games disappeared from the streets as suddenly as they came.

worth Avenue electric. Saw, for the first time of the season, marbles, jackstones, and jumping rope. *Time*, late in the afternoon; *weather*, mild and fair. During the next week all these games, together with ball, became common on the Normal campus." "Mar. 31. 1.00-2.00 P. M. Cloudy and cold. During a walk of several miles I saw many groups of small boys without seemingly anything to do—just loafing along, or sitting with hands in pockets. Not a game of marbles, only two of ball, and a few of jump rope." By the last of April of this same year the boys of this vicinity had nearly stopped playing marbles, though a few sporadic games were detected during the next month. Ball was the prevailing game, though games of chase and similar running games began to be frequent, especially in the dusk of evening. General observations, made both in Chicago and Worcester, place the greatest interest in running games during the months of May and June, and the hours of the day those immediately following supper. While these are approximately the correct dates for a few games at a given latitude, it by no means follows that they would be correct for other localities. Indeed, we are told that the Greek boys of the present day play ball in winter instead of summer, and local conditions will undoubtedly modify the time of most games.

It is difficult to determine the time of playing; to give the reason is still more difficult. One young boy, when asked how they happened to begin to play marbles during a certain term, replied: "Oh, first one of the boys brought some marbles to school, and then others brought theirs." This does not explain how the first boy happened to bring his marbles, but under favorable conditions it is easily seen how a game may rapidly spread by imitation over a whole neighborhood, or even a city. In the varying environment furnished by the seasons are found most favorable settings for the games when they are played; in the fall when the body requires a high physical tone to withstand the inclemency of the season, the favorite out-of-door amusements are those which contribute to the formation and maintenance of this tone; the long winter evenings contribute their share to the mental growth in another but milder manner. In summer the favorites are out-door activities, but they do not make so continuous and severe demands on the physical powers. In the spring, when the bright, warm sun, and fresh, fragrant air calls children out of doors, but the deep sticky mud draws limits about their feet, the small spongy patches of fresh earth stimulate with irresistible strength the boys' associations with marbles, the girls with the jumping rope. And thus undoubtedly can the periodic vogue of many of the recurring games be explained on the basis of natural associations, quickened

by the physical phenomena of each season; and once started at a favorable time a game spreads by imitation.

### Effect of Number of Companions and of Time of Playing.

A few facts dealing with the problems of companionship, and with the effects of Sunday and evening restraint, have been gathered from the returns of these school children, and are here presented.[1]

| Boys. | Girls. | |
|---|---|---|
| 1000 | 929 | Total number. |
| | | *I. When Alone.* |
| 340 | 325 | Books, reading. (Especially from 12 years on.) |
| 38 | 117 | Music. (Instrumental and vocal, principally the piano.) |
| 53 | 55 | Drawing, Painting, etc. |
| 21 | 81 | Making something. |
| 0 | 74 | Dolls. |
| 31 | 52 | Make-believe Games. (Especially at early age.) |
| 20 | 0 | Marbles. |
| 18 | 3 | Ball. |
| 7 | 1 | Walks. |
| 4 | 5 | Cards. |
| 2 | 4 | Talk. (To one's self, to Kitty, etc.) |
| | | *II. When in Groups of Two or Three.* |
| 40 | 151 | Make-believe Game. |
| 118 | 76 | Games of Chase. |
| 81 | 110 | Talk, Tell Stories, Riddles, etc. |
| 98 | 71 | Cards, Checkers, etc. |
| 11 | 64 | Music. (Instrumental and vocal, mostly singing.) |
| 66 | 0 | Marbles. |
| 33 | 4 | Ball. |
| 3 | 31 | Make something. |
| 10 | 8 | Walks. |
| 2 | 7 | Drawing, Painting, etc. |
| 0 | 24 | Dolls. |
| 8 | 25 | Reading. (Includes also several cases of more than three.) |

[1] Data regarding the amusements of younger children at different periods of the day, have already been secured through the extreme kindness of friends and of those interested in child study; and these, although not yet carefully studied, reveal many interesting points, which may form the basis of a later article.

*III. When in Groups of More than Three.*

| | | |
|---|---|---|
| 269 | 196 | Games of Chase. |
| 37 | 104 | Make-believe Games. |
| 37 | 43 | Cards, etc. |
| 27 | 73 | Talk, Tell Stories, Riddles, etc. |
| 67 | 4 | Ball. |
| 4 | 33 | Music. (Principally singing.) |
| 13 | 0 | Marbles. |
| 9 | 4 | Walks. |
| 0 | 6 | Dolls. |

*IV. Sunday Amusements.*

| | | |
|---|---|---|
| 203 | 246 | Reading. |
| 64 | 80 | Games of Chase. |
| 48 | 65 | Walks. |
| 52 | 38 | Cards. (Includes Bible Games, etc.) |
| 9 | 53 | Music. (Instrumental and vocal.) |
| 6 | 34 | Make-believe Games. |
| 14 | 13 | Drawing and Writing. |
| 0 | 15 | Dolls. |
| 15 | 0 | Marbles. |
| 12 | 2 | Ball. |
| 1 | 10 | Make something. |
| 3 | 3 | Talk, Tell Stories. |

*V. Evening Amusements.*

| | | |
|---|---|---|
| 102 | 280 | Reading. |
| 66 | 43 | Cards. |
| 44 | 29 | Drawing, Painting. |
| 13 | 50 | Music. (Instrumental and vocal.) |
| 4 | 37 | Make something. |
| 26 | 9 | Games of Chase. |
| 11 | 20 | Make-believe Games. |
| 9 | 5 | Walk. |
| 5 | 0 | Marbles. |
| 2 | 4 | Ball. |
| 4 | 1 | Talk, Tell Stories. |

The list of amusements "when alone" must have impressed the reader with the great emphasis given to the activities dealing with associative and constructive imagination; reading, music, drawing, making something, dolls, and make-believe games,—such is the order. Here is the suggestion of restless activity and of the paths along which it is expressed; under these conditions the creative power of the child is most active. Yet the one thing overcapping all others is the reading habit, especially strong after the twelfth year. Is this overwhelming

tendency to seek amusement in reading a perfectly natural one, or is it simply the most convenient form because open to all? Would other activities take its place, had earlier training qualified more persons to indulge in them? It seems probable that the latter is the truer answer; and had educators recognized the importance of leisure and its activities in the formation of each individual, our schools would strive to develop in each pupil the ability to do something besides gulp down stories. In his admirable monograph on reading, Dr. Hall has shown the abuse of the ability to read when it degenerates into a mere form of amusement;[1] and in later lectures and addresses he has made a strong plea for the acquisition by each child of the ability to do as many different things as possible. "How many things do you know how to do?" is his question. This plea has been made on the psychological ground that motor activity is a means of brain development. Surely, then, if the acquisition of these different powers tend to a more evenly balanced development of a man mentally, the continued practice of such activities must tend to steady one throughout life.

Lists II and III are characterized by those amusements which more than others foster the development of social habits —habits of forbearance, obedience to law, competition, co-operation, public spirit. The fancy of each child now is less free than in the condition of list I; even in the make-believe games it must yield to that of others, become more conventional and more cramped. List II by itself emphasizes the value of a chum in the normal development of every individual. If a child has not, in brother or sister, one of its own age with whom the most confidential relations may be established, it is the duty of parents to encourage and promote such relations.

The Sunday and Evening amusements exhibit the effects of restraint in two ways: first, in the predominance of isolating amusements,—a glance will show how much more these groups

[1] "Reading, in emancipating men from their physical and mental environment, often weakens local pride and local interest, and creates a distaste for what is nearest, and what, therefore, should be pedagogically first. Finally, we sometimes find a habit of passionate reading in children that not only interferes with physical development, but destroys mental and moral independence, and may be called as morbid as the writing mania. Thus I have gradually almost come to the opinion that many of our youth would develop into better health and stauncher virtue, and possibly better citizenship, and a culture in every way more pedagogical and solid, had they never been taught to read, but some useful handicraft, and the habit of utilizing all the methods of oral education within reach, instead." Hall, G. Stanley: *How to Teach Reading*, p. 17.

resemble group I than either II or III; and secondly, in the character of certain amusements which appear as a sort of protest against this restraint. As if the child should say: "If there 's nothing else I can do in peace, I 'll read;" or "I 'm tired of staying in all day. Let 's take a walk." Here is a basis for the consideration of the problem which confronts so many conscientious mothers and fathers: "What shall we do with our children Sundays? Shall they play the same games as on other days?" The answer in the individual case will depend much upon the personal belief and Sunday habits of the parents, but should be modified by the consideration of the probable effect of the day's activity upon the child.

Can one day in seven be made to have a different signification from other days without an injurious influence upon the young through the associations they form about it?

Something can be said for the educational value of a rigid Sabbath. If, even by what seems an artificial restraint, we are led to habits of contemplating the deeper and more spiritual things of life, to a more careful consideration of our duties toward God and man, the value of these habits from the commonly accepted moral standpoint cannot be denied; and if at the same time the American people learn how to rest from their nerve-destroying restlessness and activity, the value of a Sunday different from other days will be equally apparent from the physiological standpoint. But if a difference is to be made, the effect of the change should be the criterion of its legitimacy. It is our belief that psychology and physiology both advocate a holy day of rest, and that if parents felt the need of such a day, and its import, the character of the day would seldom appear so irksome to the child; for his appreciation of the day would be greater, and his liberties wider.

## Articles Made or Attempted.

Although question V asks the pupils to "describe any *play-thing*" they had made, it is surprising to find so few games have been made; a few puzzles and checker boards are about all. There are, however, a large number of toys which are miniature copies of things in the child's environment, and which form the material basis of many of his plays; there are the dolls and toy animals, the houses, the water wheels and other machines, the sleds, boats, carts, the wooden axes and other model tools, the sword and gun. These are the things most commonly made by children; and they touch human life on all sides. Of the toys made, not included in this class, the majority are those that develop skill and self-mastery on the part of the user; the ball, top, stilts, snowshoes, and many kinds of gymnastic apparatus belong to this class.

As the children approach the "teens" a tendency arises, that is well expressed by one of the girls, who no longer makes playthings, but "things that are useful." Under this class are included the articles for Decoration as well as for Use; things for personal adornment, to beautify the school or home, and even various foods. This whole list, as may be seen, by no means begins to reach the limit of what the child may make, though it is suggestive both to the framer of a course in manual training and to a teacher looking for suggestions for her daily work.[1]

## I. For Play.

### *1. Games.*

By Boys:—Puzzles 14, Marble game 1.
By Girls:—Puzzles 4, Anagrams 1, Checkers 1, "Game similar to checkers" 1, Old Maids (cut from paper) 1, Dominoes 1.

### *2. Dolls and Doll Toys.*

By Boys:—Dolls 31, Man 7, Soldier 4, Indian 1. (Material used, paper, wood, clothes pins, and potatoes). Jumping Jack 4, Clothes pin Fighter 2, Hat 1, Boot 1, Doll Furniture 53, (chairs, tables, beds, benches, cradles, swings, cupboards, dishes. Material, paper, pasteboard, wood, clay.)

By Girls:—Dolls 304. (Materials, rags, paper, wood, clothes pin, pipe, stick, peanuts). Jumping Jack 3, Doll's Clothing 252 (dress, apron, waist, cap, bonnet, hat, cape, skirt, petticoat, cloak, pocket in dress, quilt, shoes, slippers, bloomers, doll's outfit). Doll's Furniture 141. (Bed, chair, rocking chair, high chair, sofa, table, dishes, carriage, cradle, bureau, hammock, pillow, mattress, stove, candlestick, tin looking-glass, wooden tub, benches, rope, knives and forks. Material, paper, wood, pasteboard, clay, burdocks.)

### *3. Toy Animals.*

By Boys:—Horse 12, cat 9, Snake 3, Animals 2, Dog, Elephant, Fox,

[1] Mr. James P. Upham, who for over twenty-five years has been connected with the premium department of *The Youth's Companion*, states that for prizes the boys are most likely to choose "something they can make something or do something with, or to earn something with;" thus the scroll saw has been by far the most successful premium ever offered by the paper; likewise the most popular premium for girls has been the Kensington Patterns (for art work). The following list includes the most popular premiums as determined during a period of twenty to thirty years: The camera (at present), microscopes and telescopes, magic lanterns, soldering casket, glass cutter, pocket tool-holder, outfit for making initial jewelry, carving tools, pocket knives, materials for building canoes, Florentine Bent Iron Work, Weeden's Engine, materials for a model motor, toilet hair clippers, oil painting outfit, water colors, etc., celluloid decorating outfit, dolls, collection of puzzles, megaphone, printing press, and certain books. In general, "educative" toys were considered unsuccessful as premiums, as also were electric toys on the whole. The latter were not nearly as popular as steam toys.

Goat, Monkey, Owl, Oxen, one each. Material, wood, paper, pasteboard and potatoes.

By Girls:—Cat 7, Horse 6, Sheep 3, Baboon 3, Rat 2, Dog 2, Duck 2, Bird, Clay Animals, Cow, Fish, Oxen, Pig and Tiger, one each. Material, paper, rags, cloth, wood, handkerchiefs, pussy willows, and potatoes.

### *4. Model Toys.*

By Boys:—House, Tent 125, Snow Fort 8, Lighthouse 2, Bridge, Church, Depot, Saw Mill, and Small Farm, one each, Cart 138, Whip 5, Reins 5, Harness 3, Gig 3, Coasting Cart 1, Sail for coasting cart 1, Goat Harness 1, Bicycle 6, Engine, Cars, etc., 9, Railroad Track 4. Boats 205, includes toy boats of all kinds, birch bark canoes, used for models, and also raft and boats for actual use made or attempted by boys in their terms. Sled 151. The returns did not always distinguish the toy sleds from those made for use. Toboggan 6, Sleigh 1, Sledge 1, Ladder 30, Axe and Hatchet 15, Fork 9, Knife and Fork 1, Shovel 7, Snow Shovel 3, Circle Saw 6, Hammer (wood) 3, Spoons 2, Rake 2, Spade 1, Billy 1, Acorn Pipes 18, Cob Pipes 8, Orange Skin Teeth 4, Clock 2, Wire Spectacles 1, Money 1, Sword 66, Knife 47, Gun and Pistol 28, Bow and Arrow 16, Bow Gun 3, Soldier's Hat 10, Cannon 4, Spear 3, Tomahawk 2, Drum, Fife, Flag, Lariat, Marble Gun, and Shield, one each.

By Girls:—House, tent 68, Snow House 4, Log Cabin 1, Hut 1, ighthouse 2, Toothpick House 1, Doll Park 1, Bank 1, Cart 9, Reins 7, Harness 1, Engine 1, Boat 58, Sleds 21, Ladder 2, Saw, Rake, Spoon, Tin Scissors 1 each, Clock 3, Eye Glasses 3, Pipe 1, Knife 10, Sword 4, Gun 1. The material used by boys was commonly wood, by girls paper.

### *5. Mechanical Toys.*

By Boys:—Water Wheel and Water Hammer 20, Sand Wheel 2, Trip Hammer 1, Derrick 9, Scales 9, Theater 8, Elevator 5, Machines 4, Shafting 1, Shaft-holder 1, Train signal switches, etc., 1, Piece of tin with two holes through which passes a string; pull the string and it will cut 10, Kite 39, Pin Wheel, Windmill (wood) 3, Balloon 9, Air Ship 1, Electrical Apparatus 1, Batteries 10, Motor 7, Dynamo, Electric Car, Holtz Machine, Induction Coil, Incandescent Light, Switch Board, Telegraph, one each, Telephone 16, Camera 5, Sketching Camera 1, Magic Lantern, Jack Lantern 21, Sling Shot 16, "Stopple," feather dart 12, Tic Tac 11, Pop Gun 2, Force Pump 2, Pea Shooter 1, Traps 12, Fish-rods 3, Fish-lines 1, Whistles 26, Clappers 8, Violin 2, Banjo 2, Drumstick 1, Wooden Drum to use in school 1.

By Girls:—Scales 4, String through button or tin cover—twist thread and then pull it 1, Kite 12, Pin Wheel 7, Windmill (paper) 3, Telephone 6, Feather Dart 1, Cat's Rattle 1, Horn 2, Accordion, Guitar, Violin, one each.

### *6. Toys for Physical Exercise.*

By Boys:—Ball 42, covering a ball was too difficult for one boy of fifteen, Top 26, Marbles (clay) 10, Bat 7, Foot-ball 3, Horse Shoe Rings 5, Bean Bag 1, Boomerang 1, Bowling Alley 1, Stilts 25, Snowshoes 9, Skees 7, "Jumper" 2, Skates 1, Ice Boat 1, Swing 4, Hammock 1, Boxing Gloves 4, Diving Board 4, Apparatus for high jumping, Vaulting Pole, Pounding Bag, Chest Weights, Trapeze, Exerciser, one each.

By Girls:—Bean Bag 13, Ball 9, Top (spool and paper) 4, Marbles 1, Bat 1, Parlor Croquet Set 1, Stilts (of tomato can) 5 (of wood) 3, Snowshoes 1, Swing 13, Hammock 4, See Saw 1.

## II. Articles for Use.

By Boys:—Picture Frames, Bookcase 3, Book Shelf 1, Writing Desk 2, Desk 1, Ink Stand 2, Shelf 2, Bracket 1, Music Rack 1, Music Stand 1, Blackboard 2, Pool Table 1, Bench 3, Hammock Frames 1, Towel Rack 1, Step Ladder 1, Snuff Box, Cricket 1, Hen Coop 7, Pigeon House 6, Bird House 2, Bird Cage 1, Cage for Animals 4, Dog House 2, Rabbit House 2, Fly Cage 2, Squirrel House 1, Canvas Shelter 1, Carpenter Shop 1, Bicycle Stand 1, Canes 5, Sun Dial 3, Fence 1, Fence Picket 1, Fireplace 1, Furnace of Brick 1, Keg 1, Saw Horse 6, Sharpen Chisel 1, Tool Chest 5, Weather Vane 1, Candle Mold 1, Bullet Mold 1. Material for the most part, wood. Pictures 10, Valentines 5, Paint Flowers 1, Drawing (failed repeatedly on some particular object) 2, Paper Hats and Caps 6, Fans (wood) 7, Chain 3, A Book 1, Envelopes 2, Initials 1, Horse Hair Rings 1, Braid Hair (failed) 2, Sewing (failed repeatedly) 9, Compasses 2, Cotton Gin 2, Pulp Map 2, Wood Map 1, Writing Book, Australian Hut, and Ruler, one each, Candy 2, Gum 1.

By Girls:—Aprons 7, Dress 7, Dress Pattern 2, Crochet Dress 1, Coat 1, Coat Pattern 1, Collar 1, Sunshade 6, Trim Hat 1, Straw Hat 1, Quilt 5, Fan 2, Stockings 2, Mittens 1, Handkerchief 1, Finger Ring 1, Bags 3, Lamp Mats 3, Mats 2, Blankets, Bookcase, Bureau, Ladles, Pillow Shams, Poker, Rug, "Things that are useful," one each, Valentines 18, Landscape 12, Copy Portraits 2, Sketch faces 2, Easter Eggs 2, Pictures of objects, as cat, flowers 3, Write books (attempted) 2, Write Poem 1, Soldiers' Caps 4, Envelopes 3, Scrap Book 2, Ball, Book, Boat, Card Case, Fans, Fire Hat, Glove Box, Lantern, Love Boxes, Paper Pulp, Picture Book, Ring, Silver Heart, one each; material, paper. Fancy Work 135, includes Crocheting, Lace, Knitting, Sewing, and the following articles: Picture Frames, Tidies, Cushions, Pin Cushions, Pen Wipers, Dressing Case Covers, Tassels, Sofa Pillows, Bead Rings, Tray Cloth; Chains (paper and daisy) 5, Wreaths (leaves) 5, Peach stone Baskets, Fancy Bottle, Initials (cut from wood and framed), one each, Compass 2, Ruler 2, Map, Nail Map, Pulp Map, Pen from quill, School Bell, one each, Cake 7, Candy 5, Bread 2, Pie 2, Pudding 2, Ice Cream 1, Lemon Candy 1, Molasses Candy 1.

It is not to be supposed that any one child will make all of these things. Yet some children are quite likely to make a great number of them, and the variety and care with which they are made will be an important index of the child's capacity. Most children will, however, imitate the things made by their friends, striving to do as well or better; the genius with his original work is not the type of the child any more than of the adult. Hence the necessity of much of the work being suggested by the teacher.

The most successful attempt I have ever seen at original and careful manual work in the school, was in a fifth grade in Worcester, Mass., where a bright, progressive teacher, acting on a suggestion thrown out in a public lecture by Dr. Hall, told her pupils that they might make and place on exhibition in the schoolroom anything they chose. The best example of carefully and intelligently co-ordinated work was in the Cook County Normal School. In that school, particularly in the

lower grades, where there is greater need of supervision, the manual work is generally outlined by the teacher, and made to help out and illustrate other work of the school, while in the higher grades the pupils are allowed to make whatever they wish, provided their plans receive the approval of their teachers.

## The Child's Point of View.

No one has ever received the best reward from child study unless he has been led to a keener appreciation of childhood, and to a deeper and more genuine love for the child. The characteristics of his play may be outlined as has been done in this paper; the spirit of his play can be caught only by the person who can play with the child and enjoy the play; a touch of this spirit, however, may be found in the words of these children concerning their own amusements. In the following paragraphs quotations are made from the answers of the children.

### I. Reasons for Not Using Certain Amusements.

"I like games. I don't like toys because they are no good." G. 10.

"Because I'm too big." G. 11.

"My favorite toys are dolls, but I do not use them very much because I am getting too old for them." G. 13.

"I used to play with dolls, but I have outgrown them. I think I was about four years old when I played dolls." G. 13.

"I cannot say that I am really tired of my childhood pastimes, although, of course, I do not indulge in them now." B. 17.

"The toys I like best are Brownies, printing press, electric motor, scroll saw, Welch's steam engine, type writer, tool chest, small shot gun, and a rifle. The reason I like to play with these toys, because these are toys for bigger children and the others are for babies and other small children. Also for another reason, you can use some of these toys and gain money on them." B. 11.

"I like a ball, foot-ball, and used to like tops and marbles, but do not now. I like baseball and foot-ball because I receive much enjoyment from them, and I come together with my friends, and time is very pleasantly passed." B. 14.

"I do not use the toys that I like best because I want to save it." B. 11.

"I don't play with my toys and games that I like best because I have to help my mother all the time." G. 12.

"I don't play my favorite games, because no one wants to play." G. 12.

### II. Reasons for Preferences in Amusements.

"Marbles, Ball, Top. I don't know why I like to play those best." B. 11.

"I like these toys best, because I have played with them most." B. 12.

"I have no favorite play. I play games with the other children whether I like the game or not." G. 11.

"I play the game I like when the other boys want to." B. 13.

"I do what the rest happen to want to do, and I can never tell what that will be. G. 14.

"I like to spin a top because it is fun to hear it hum." B. 8.

"I like a train of cars best because I can make them go when I run." B. 9.

"Because I like to hit the other boys' tops and break them." B. 8.

"I like to play with a pea-blower and pop a hen on a leg, and the hen goes just like a sprained leg." B. 9.

"I like to play with a gun. Sometimes I swipe my father's gun and kill birds. Once the first time I swipet it I killed my cat and the kik of it knock me down." B. 11.

I like blocks best because I can build houses and castles with them." B. 10.

"I like swords because I heard of brave men. I like lances because I read of Mohammedans and Christians." B. 8.

"I like to play with my dolls because I make believe they are alive. I like to play with my cart because I make believe I am a horse and have somebody for a master." G. 8.

"The playthings I like the best to play with are my kittens, my dog. I like these the best of all because they are alive and can move; dolls cannot move nor walk, so I do not like to play with them." G. 13.

"I like to play with a dog because the dog plays with me." B. 11.

"I like to play with a doll because I can pretend it is my baby." G. 7.

"I like a doll, a doll carriage, a doll bed, a doll hammock, a doll trunk, a doll kitchen, a doll house and other furnishings. A house because it is so like a big lady and a big house." G. 10.

"I like dolls because you can make believe you are their mother, and send them away and to school, and have lots of fun. Paper dolls, because you can make pretty paper dresses for them." G. 14.

"I like to play with dolls when we are many to play, but now I don't care much for dolls. We often make party and eat in little toy dishes. I like to eat in small dishes because I think the food tastes better." G. 13.

"I like to race on foot because you can get a price." B. 8.

"I like to play marbles because you can get lots of them." B. 10.

"Bat ball. Because it makes my muscles strong." B. 8.

"I like to ride a bicycle because your muscles will be hard." B. 13.

"I like a drum to play because if I could play so when I would be a man I would be in a band " B. 12.

"I like to play show to do tricks." B. 12.

"I like a bicycle because it makes me strong and I like to do tricks on it." B. 12.

"I like to play with my drum because all the people look at us." B. 11.

"The toy that I like is fish-pond, because it shows whose hand is the most steady. I like to play checkers because it shows who has the most skill." B. 14.

"I jump rope to see if I can jump as long as the others." G. 10.

"I like to play tag because I won't get caught." G. 10.

"I like my little express to make off I am a little expressman. I have got an old cowboy's hat and a sword and I make off I am a cowboy. I go through the road with my wagon as fast as I can go, and I scare all the little fellows." B. 12.

"I like to dance so as to be in a show." G. 11.

"I like to skate because one day I can be a fancy skater." G. 13.

"I like to play a piano because we can take music lessons. Then you can go to play in the churches and in shows." G. 13.

"The best game was tag because there was running in it." G. 11.
"I like a bicycle because I can go on it very fast and race with other boys." B. 11.
"I like carpenter tools best because you can make little wagons, chairs." B. 11.
"I like my tool chest because I can make some little tables for my little sister." B. 13.
"I like to play checkers because my papa plays with me." G. 9.
"I like to sew dresses on my sister's doll because I love to cut out patterns of capes, skirt, also waist, and many other things. My mother lets me sew them on the machine. I enjoy it. Sometimes she buys me some aprons and I make them myself. I love the machine very much." G. 14.
"The reason I like these toys is that I think there is a great deal of fun in them. They take the lonesomeness away from you." G. 13.
"Such toys as checkers, dominoes and tiddledewinks, I like these toys because one can sit down and have some fun, but still be resting." G. 13.
"I like to fly kites the best. Because I do not have to be running around all the time and will not get sweaty." B. 10.

To the reader who has noted these words of children, it will be apparent that the reasons given do not always explain. But inasmuch as the most careful students have not yet evolved a satisfactory theory of play, it is no wonder that the child sometimes fails to tell just why he plays certain games. Yet on the whole, in the light of this study, some of these answers show a wonderful power of introspection, and marvellous accuracy.

As the child begins to grow beyond the normal age for a certain kind of amusement, the child assumes a scornful attitude toward it; he is "too big;" it is "a baby game," and although only last year he played it as hard as ever he could, plays it occasionally even now in thoughtless moments, it seems to him something very remote. Thus the child's estimate of the age at which he played certain games, is likely to be one or two years less than it has been shown to be. And up to a certain limit the older the child, the older it thinks it was when it last played a given amusement, *e. g.*, the nine year old boys from a certain school state that they "played horse" when five years of age, the ten year olds when six or seven, those of eleven at seven, those of twelve at eight, and one boy of fourteen remembered that at eleven he still played horse.

Can any one doubt that the little boy of eleven likes best to play marbles, ball and tops, even though he is unable to tell why? Does it not seem probable that many a child likes best those things with which he "plays most?" Many a child plays but seldom with the toy he would prefer, because "sometimes one would want to play one game and some one else another," and so he "does what the rest want to do, and can never tell what that will be." Many games would be justified

if they did nothing more than offer "an opportunity for friends to come together" so that "time is very pleasantly passed." One play may be good for a boy because he can "run," show off, "get muscle," and yet not detract from the value of a game in which "one does not get sweaty," or in which one "can enjoy oneself and rest at the same time." There is pleasure in things that "are alive," that move, that "make a noise;" there is also pleasure and profit in taking the small, inanimate toy and endowing it with life, in feeling at once its companion, its creator and its master. How many a boy who at ten years of age, feeling all over the power within him, "pops a hen on the leg," or "kills birds" or finds it "such fun to run into something" with his little express, "and tip them all out if he can," has unjustly been considered unnaturally cruel? What a wide range and what clear backgrounds are given to his ideas as in imaginative games he builds "houses and castles," and reproduces life about him, and the past and present in history and fiction? The little eight year old runs his race to "get a price," and he likes the race. Ever since Saint Paul's day it has seemed good to "so run that ye may obtain." And these children, more and more as they approach those years when the adolescent soul yearns for the wider, richer things which it glimpses but grasps not, place before themselves something to be obtained, some end to be reached, and find a genuine, wholesome pleasure in the attempt to attain this ideal, and in the anticipation which accompanies this attempt.

## Application of Study.

What is the significance of this study? That depends both on the attitude and the experience of the reader. The principal points of value are here presented as they appear to me.

Much emphasis has already been laid upon the place of amusements in the development of mental life.[1] It is vastly more important that teachers and parents see that conditions are favorable for the profitable employment of the child's leisure time than that they graft "the play instinct" upon the methods used in the school. Later we shall indicate how some of the special facts brought out by this study may be utilized in the school room; now we wish to lay stress on the greatest "school of infancy," *free play*. From no other source does the child learn so much that is of permanent value in after life as in those hours spent in play apart from the direct influence of adults. Yet the value of this play may vary much accord-

[1] Compare Baldwin: Mental Development. N. Y., 1897. pp. 129-147.

ing to conditions imposed by the child's elders. *It becomes, then, the duty of parents and of society to provide that, as far as possible, the most favorable conditions shall exist for the proper kind of amusement*[1] *at the proper time in every child's life.*

It has been shown that the early part of life is largely given up to individual development, to acquiring mastery over self, and to the comprehension and mastery of the physical environment in which the child is placed. It is necessary that he should have a chance to try his strength, exercise his skill, and satisfy his curiosity and imagination in every way. *He must have toys and objects of many different kinds* which his imagination may transform in imitation of the realities about him, or upon which he can exercise his skill. Are these conditions always found?

As the child grows older human society enters more and more into his development. The influence of companions of the same age, of one's peers in actual life, is the foundation of society. This rubbing together while engaged in what are to them the realities of life, is the essential factor at the base of every rational attempt to develop in the young principles of good citizenship. Concrete examples are the George Junior Republic at Freeville, N. Y., and the scheme of self-government followed in the Chicago Normal School. In both of these exceptionally successful attempts at self-government among minors, the actual life of the community has been the foundation. Their failures have been where there was a conflict between the theoretical and the actual conditions. The school itself is in many ways an ideal social community, and may be organized along lines which touch its own life in a most effective manner. But children detect sham. The moment a school claims to be an artificial city or government which it is not, it becomes less effective in training for citizenship than if not so organized. At the George Junior Republic, where the writer spent two months in the summer of 1897, the conditions were ideal for a community founded on the model of the United States government. The children were from a class of society where they had already faced the problems of securing an existence and met the temptation and crime. More than most children they were prepared for the rough conditions of the camp life at The Republic. It was for most of them a fairer opportunity for existence than they had hitherto enjoyed. They recognized the reality of their life under slightly changed conditions, and also, as never before, realized that they were a part of the social whole. But notwithstanding that in most respects "the citizen

[1] Throughout I have used the word "amusements" as almost synonymous with "activities."

of the Republic" was a true citizen, it was impossible to disguise the fact that at times there was a power over them which did not originate among themselves, and which at times caused many to feel that all was a sham. In a school any such diversity between the actual and pretended conditions must make itself felt injuriously. Hence the recognition by the teacher of her schoolroom as a true social body, the members of which can be led to recognize their mutual duties and privileges—a result often accomplished by a skillful teacher—is much to be preferred to any artificial government which can be formulated.

Another problem which confronted the George Junior Republic was what to do with the younger members. The majority of the citizens had already reached their teens; but the few below twelve years of age, almost without exception, did not readily adapt themselves to citizenship. Their social instincts were not fully enough developed to warrant placing upon them the full responsibilities of citizenship even in a junior republic. The problem was solved by making the younger children wards of some citizen of twelve or more. This is empirical proof that the conditions, favorable for one age, may be unsuited to an earlier age, and is a caution against too elaborate schemes of self-government at too early an age in our schools.

Certain conditions of society tend to develop a child along one line to the neglect of another. Thus the country school while it favors the development of a strong individual character, frequently does not furnish as good an opportunity of developing co-operation as the city school; but there is more danger that the large classes of the cities may force the social development upon the child at too early an age; at an age when he is not yet ripe for it. Apart from the social demands, the needs of physical development make it most important that during the years from 9 to 12 every child should have plenty of companions, and suitable places in which to play these active running games which do so much to give final control over self, as well as the right spirit toward one's fellows. The child should also be supplied or, better, be allowed to supply himself, with those toys which tend to foster the physical exercises popular with the young at this period. Rousseau's estimate of the importance of such games is found in the following letter to D'Albert:

"In my time children were brought up in a rustic fashion, and had no complexions to keep. . . . Timid and modest before the old, they were bold, haughty, combative among themselves; they had no curled locks to be careful of, they defied one another at wrestling, running and boxing. They returned home sweaty, out of breath, torn; they were true blackguards, if you will, but they made men who have zeal

in their hearts to serve their country and blood to shed for her. May we be able to say as much one day of our fine little gentlemen, and may these men at fifteen not turn out children at thirty."[1]

This study is emphatic in its proof that one purpose of education, one of the aims of the school, is to prepare for *proper employment of leisure moments.* Child life is largely made up of such moments. And in no class of society do the long hours of work (often fourteen or fifteen hours per day) of our grandfathers now prevail; as a people we can say as never before, "our time is our own." How to use this time is one of the serious problems of to-day. It will leave its trace in our physical being, in our moral and mental make-up, in national character. The increased interest in athletics of all kinds and in out-door sports during recent years shows how this problem has forced itself forward; so, too, the many schemes for self-culture in the more favored homes, and the settlement work among the less favored districts of our large cities. The school has already done much, especially in the direction of developing "a many-sided interest," to recognize and meet this problem. Wherever literature, music, drawing, manual training, nature study, or any other branch of the curriculum has been so taught that a child has come to appreciate more fully the richness of the world of nature and man about him, and especially when he has acquired skill enough so that along any of these lines he can do something, however slight—can give some expression to his creative powers—the school has lent its aid to the formation of habits which will influence the whole future of that child's life. With the adult, even more than with the child, amusements are habitual. Hence must the school take into consideration the effect of its work, in the formation of conditions that will affect the play of the children to-day, and determine to a large extent their habits of amusement when men and women grown. The school will either develop activities which will persist, or it will prevent, by over-stimulation of certain interests, others that ought to persist. Consider for a moment these words of an exceedingly able high school boy of fifteen, and a hard student: "I never made anything—never had time." There is something almost pathetic in these words. There is also a great deal of truth in them; for though he generally led his class, he was compelled to study early and late, and, although he was supposd to have all that indulgent parents could give, his home environment did not favor manual work of any kind.

Realizing, then, that to prepare for the right use of leisure

[1] Morley: Rousseau, Vol. I, p. 21.

moments is one of the aims of school life, let us consider how this study may be applied, first to the course of study and then to the methods of the schoolroom; without, however, distinguishing sharply between method and content.

In many kindergartens much stress is laid upon the unity of the ring and the unity of effort, and properly so. But although much work in common may be expected of children of this age, the period has not yet arrived for advanced co-operation, and there is danger that the social ideals of an adult may be made to take the place of those natural to this period of life. This danger is especially great in an age when the popular interest in sociology is so great as at present. Yet in few other ways do the followers of the great Froebel depart from his teachings further than when they emphasize the kindergarten as the place for social development rather than individual.[1] We think this study shows in its curves something of the true order of nascent periods; the order will be found to agree closely with that laid down by Froebel himself, though with greater definiteness. It shows that "boyhood" rather than "childhood" is the time when social instincts are strongest. "Boyhood" is the time when "they seek the laws lying in the material of the play, and adapt themselves to these, or they obey laws lying in the thoughts and feelings of the human

[1] Prof. Colozza, of the Normal School at Naples, in his book entitled *Play in Pedagogy*, advocates less interference with the free play of the kindergarten child, and warns against starting the child into plays at too early an age before the natural inclination for such play has developed.

Another eminent Italian, Guiseppe Sergi, is quoted against the common practice in kindergartens by Dr. A. F. Chamberlain. (*Ped. Sem.*, Vol. II, p. 474.) "Suggestion in education has its limits. At an age when mental activity is in process of development, certain procedures may have grave and dangerous results—the brain, continually waiting for suggestion after the first, may be arrested and remain in habitual inertia; a narrow and restricted limit of cerebral activity may be created; a species of mental parasitism may arise; too clear a road and too easy a passage may be traced out for mental activity, which will natually result in diminishing the individual mental variations which are the best advantage possible for the development of the mind and for the evolution of its products; just as in the case of the muscles, the cerebral functions, accustomed to be guided step by step, will cease to be prompt and quick, and in children there will be established real inertia, the result of hindering proper functional development. The Frobelian method is weighted down with these defects, for, while seemingly desiring to allow liberty and independence of mental activity in children, in reality it suppresses them." . . . "In the use of plays and games suggested or made by the instructors, and of which the children are merely the automatic executors, the same method of suggestion continues, which ruins the natural development of the children, tends to equalize them all and to abolish all initiative and individuality."

being."[1] But of "childhood" he says: "It is impossible to establish among the various stages of human development and cultivation any definite order with reference to their relative degree of importance, except the necessary order of succession in their appearance in which the earlier is always the more important. In its place and time each stage is equally important. Nevertheless, inasmuch as it contains the development of the first points of connection and union with surrounding persons and things, the first approaches toward their interpretation and understanding toward the comprehension of their inner being, this stage (of childhood) is of paramount importance. . . . Therefore, the child at this period should see all things rightly and accurately, definitely and clearly; and this applies to things and objects themselves, as well as to their nature and properties."[2] The following is his opinion of the effect of activities unsuited to an earlier stage of development; "He (the child) is much injured and weakened by having placed before himself at an early period, an extraneous aim for imitation and exertion, such as preparation for a certain calling or sphere of activity. The child, the boy, the man indeed, should know no other endeavor but to be at every stage of development wholly what this stage calls for."[3] This caution is of value higher up than the kindergarten.

The object of the first few years of school life is to further the development of the child, not to make him a full-fledged citizen. The perfect individual must precede the perfect state. Hence the first few years at school must deal largely with the immediate sensuous environment of the child and with his relation to it. He must be guided to a fuller knowledge of things around him—of what he can do with them, of what they may do to him—and this knowledge will include many of the simpler duties owed to those about him. Toys and objects of all kinds should be used freely as means of expression—to help tell the story of life about him—to help comprehend it. Much manual work should be encouraged, but it should neither be too accurate nor too delicate. Rough imitations of things about him, made of any material that is at hand and can be readily manipulated, are probably the best things to make, *e. g.*, toy men and women, animals, houses, furniture, dresses, machines, etc. Many of these are the natural toys of childhood.

During the middle and latter part of the elementary school grades especially between the years from nine to twelve, much

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[1] Education of Man. p. 303.
[2] Education of Man p. 50.
[3] *Ibid.*, p. 30.

more attention should be given to physical development than is now common in schools. Our curves show this to be the time of greatest physical activity. Kline in his study on Truancy[1] tells how the desire to get away from the restraining influence of school and to do something has sent many a boy to the reform school. The success of the methods used in some of the most progressive reform schools, where the hours ordinarily devoted to literary subjects in our common schools are shortened and much manual work added with gratifying results, proves experimentally the soundness of this suggestion.

This is the period for the acquirement of manual skill and dexterity. The child likes to do things for the pleasure in doing, in learning to do new things and in showing that he is able to do them. At this period he should learn to do many things, should lay the foundation of skill along many lines. This is the period rich in possibilities, ripe for the formation of varied associations, according to the latest investigations of neurology.

Hence, not only should there be a great diversity of physical exercise, but a great variety of general ideas should also be apprehended in their simpler associations. Literature and nature study offer the widest possibilities along this line, and at the same time form the best content for the study of language. The meaning of ideas previously gained should be broadened, and new relations formed and new ideas introduced from a wider field. Perhaps at no time in school life should the range of the curriculum be as general.

In the next period is the birth of adolescence with all that means of new, far-reaching thoughts and feelings. Things begin to have new meanings and new purposes, and aspirations are formed—ends far away are sought. Less frequently is the activity in itself sufficient. Effort becomes concentrated. The course of study at this time should gradually become better co-ordinated into a few and more distinct groups, but should not suddenly confine the interest of the pupils to the three or four studies of the first year in the high school, as is now common. Thus to imprison the interests of the children within such narrow and forbidding walls is as unreasonable and criminal as were some of England's laws a century ago.

Although many speak of introducing the play spirit into school and of teaching everything by means of play, no one knows better than the teacher that all the child's activity is not play—in the sense of the free sportiveness of animals. Many of its amusements are serious for the child as well as for the adult. He must feel the importance of the task at hand,

[1] *Ped. Sem.*, Vol. V, p. 147.

and the interest in the result continues to increase with every additional year.

In the earlier years before eight or nine, the largest possible use of all sorts of objects should be made. There are two main purposes which these fulfill: first, to gain new impressions, for which actual objects are preferable; secondly, as a means of expressing the stock of ideas already obtained and of broadening them. For this latter purpose, the rough imitative toys just mentioned on pages 250-252 or pictures may be of greater value, as they can be more readily handled and comprehended by the child. Common objects such as stones, leaves, flowers, pieces of paper, burdocks, etc., may be used as furniture, building material, dishes, money, and in countless other ways to great advantage. Especially will this be possible in the rural schools, which are less able to purchase supplies of a more elaborate character; and the gain in the capacity to use material at hand will be a distinct advantage to the child when later he is compelled, with limited resources, to face the problems of life.

The next period is really one of the richest in the development of the child. If in the earlier stage the training of his senses has been thorough and his impressions many, at this period it will be possible to gather these into usable form, and through them to apperceive much knowledge which will be a foundation for future effective creative work. Considering the great variety of definite amusements at this period, and the way in which these are played, we get a clue to the method of covering the wide field demanded, without overburdening the child with a multitude of subjects at one time. It is the method of treating some particular phase of a subject quite intensively for a time, as if it were an entire field in itself, and then dropping it for something related perhaps, but in turn considered as a whole. Literature and Nature have been referred to as especially adapted to this treatment. Social tendencies should now be fostered more than before. Things made, more than earlier, should have some use to which they can be put. Mechanical toys and toys for physical exercise are well adapted for part of the manual work of this period. The possible use of things at hand, which on both an economic and an ethical basis should be encourged at all stages, should now be taught with the greatest care, for this is a period of exceptional possibilities along this line.

From the thirteenth year the child's amusements take on a decidedly co-operative and competitive character, and his efforts are more and more confined to the accomplishment of some definite aim. The course for this period will concentrate the effort upon fewer lines. A subject which on account of interest

might better have been treated in a few days or weeks in a lower grade, may now well occupy several months of more careful and deeper study. The result now demands greater attention, and the best work should always be insisted upon. Societies and associations of all kinds which favor this co-operation to accomplish some worthy end are to be encouraged now as never before. Nor can this well be separated from the spirit of emulation which has been found to be so characteristic of this period. A trait so prominent certainly justifies the Roman Quintilian in placing the love of emulation among the most important feeling upon which the teacher has a right to call; for it is only through the desire to do or make something, to show one's superiority or power over something or some person, to overcome some obstacle, that the individual, the nation, or the race makes progress. This same desire for mastery is present in fullest strength just at this age. It is the basis of the healthy rivalry of members, most often of a small group, in which each takes pride in the superior quality of his work. The same thing fostered by machine promotions, becomes the feverish pursuit of "marks" so often found in large schools where it appears not as a friendly contest with one's peers for acknowledged superiority giving constant opportunity for pride in personal merit, but a blind struggle to attain another end—a "passing mark." On the one side it develops "a pride o' worth" and the power to maintain one's self independently, and without asking odds; on the other, when the end receives too much emphasis, are found the seeds of dishonesty. The system of ranking, so prevalent in the great public school systems, makes it possible to find many, perhaps the majority of the pupils look upon the attaining of a set mark in their studies as the highest aim of their school work; to find principals who place a report containing few records of discipline or absence above the mental and physical health of their pupils, and superintendents who insist upon these conditions in order that their reports may be pleasing to the people.

There is no reason why throughout the course much of the work to be done should not be the *making of toys such as children commonly use.* The character of these will be seen more specifically by examining the list of things made. In the earlier years these will be for the most part simple representations of the living and inanimate things about them; later on may be made to advantage toys which are means of developing strength or skill, as for example those used in baseball or football; and still later will come the making of articles of use in themselves, as for decoration, use at home, etc. This rough division is not intended to be exclusive, as all classes of articles are likely to be made more or less at each stage; thus the

smaller children may make some of the simpler toys used by them for exercise, and many simple articles of use.

A few easy general plans are here offered by way of suggestion. One of the most promising fields is in the making of dolls, their dresses and furniture. This may be done by the pupils individually, each making articles for which it has some definite use, or by the co-operation of the whole room to fit out one doll as was done so successfully in the school in St. Paul, described by Miss Stoker.[1] The pupils of this particular school averaged fourteen years of age, and took the greatest possible interest in making something and in co-operating to secure a common result. With girls of this age or slightly younger, paper dolls and dresses might have been used to considerable extent, and advantage taken of the instructive pleasure in parties at this stage, to develop correct ideas of general social duties, and to interest in the principles of domestic science. Besides the families of paper dolls which may be made, it would be well to make table sets, tables and chairs, and eventually to have small dinner parties which might serve in many particulars for the model of those which all girls so much enjoy and play. These lessons should be suggestive to the extreme, and lay emphasis upon correct ideals.

In many schools the children already make small models to illustrate the subject studied, and in some these objects are utilized in the toy theater to dramatize the stories of which they read. Work of this sort may easily be made much more general than it is. The list of things made cannot fail to suggest many possibilities. Neither is there any reason why the teacher should not at times suggest the work of the children, though as far as possible they should be free to choose and to allow their own originality to develop. But the original child, the genius, is not the average child. Left to itself a child is likely to imitate some one else; hence it is often better in the lower grades that the teacher should select.

The value of *the out-door habit*, and of everything which tends thereto, cannot be too strongly urged. "The fresh air habit, at home and in the school, is the most wholesome bodily habit that can be implanted at the school age," writes President Eliot, of Harvard.[2] Much of the school work readily adapts itself to the formation of such habits. Nature study as taught does much, but should do more. One of the greatest values of collection is on this account. The collections which the child makes of stones, leaves, flowers, seeds, insects, etc., may not be of much value in themselves, but few motives can interest

[1] *Ped. Sem.*, Vol. V, p. 281–286.
[2] Educ. Rev. Dec. '97, Vol. XIV, p. 417.

a child more in things about him than the possibility of himself possessing them. Thus the passion for possessing takes the child to things which he should know and love; later throughout his whole life he will recognize with thrills of pleasure these old friends, and recall the exact spots where once long ago he found this or that in rich abundance. School walks, too, are of value sometimes, but in many cases, especially in rural communities, are likely to be mere subterfuges to get rid of school duties, and thus merely teach the possibility of shirking resposibilities; for the city children to whom the fresh country is always a rich treat this does not apply equally. But much better than any general walks may be the formation of walking clubs, picnic clubs, bicycle clubs, etc., which at stated intervals visit convenient places of interest.

Teachers may also refresh the interest of their children in being out of doors by the introduction of some new game. The best game to introduce is some game you used to play and especially enjoy; better still, if you can now enjoy it. Often it is no easy thing to introduce a new game as in many places the local traditions and conditions already so strongly favor certain games that others are not needed; and failure to succeed in such attempts ought not to discourage. On the other hand it is possible to find children with very scanty repertoires of games, and largely on account of their environment ignorant of the most common games. The writer can hardly imagine boyhood where the boys do not know how to play baseball. Yet it is said that when a certain play-ground was opened a few years ago in the neighborhood of a slum district in Boston, and the materials for the game supplied, the boys did not play until they had been taught the game by the attendants. On account of the limited number of associates of his own age the average country child knows fewer of the traditional games than his contemporary in the more favored parts of the city.

Children's descriptions of things they have made and the plays they have played form one of the richest fields for composition work, and one which has as yet been but slightly worked. It touches upon the most vital part of their life, and besides furnishing an interesting and rich subject for composition, reveals to the teacher much of child life with which she should be in sympathy. It could not but help and inspire her own work for her pupils. A careful study of the way children play such games as school and house, made in this manner, would contribute much to our present knowledge of the child.

Owing to the peculiar character of the returns forming the basis of this study there is danger that its true value will be underestimated by some, while others will give too great significance to the results presented. In the early part of this

article attention was called to the nature of these returns. They came from different schools as differently environed as it was possible to find in Worcester. Different teachers collected them; some talking the questions over with their pupils, and some merely giving the questions and having the answers written at once. The possibility of suggestion and the consequent unreliability of the returns at once occurs to any one who has tested the tendency to imitation, so strong in children. Accordingly the writer did not at first appreciate their true significance, particularly as they had been secured for the purpose of answering certain questions which had arisen in another study; and only after a careful examination was it realized that in an unusual manner they brought out the general characteristics of child activity, and were exceptionally reliable.

The questions were so framed that as far as possible they called up the child's own experience without suggesting any particular answer; the tabulated result did not depend on any one answer, but was a composite of a dozen or more answers, in the same return, to questions from different standpoints; and, as far as the general tendencies of child activity are concerned, the internal evidence of the papers, and the comparison with such other facts as are obtainable, favor their reliability. The evidence of suggestion was not so strong as would be at first naturally expected, and the little that was found did not materially influence the facts concerning a general activity or concerning any popular amusement. Grounds for this assertion will be found by comparing the list of questions asked with the Curves of Interest in Traditional Amusements (p. 228). Though these curves are compiled from the answers to over a dozen different questions, only between nine and fourteen years does the average number of different amusements mentioned exceed ten. Evidence of a minimum of suggestion is also found in the fact that the papers, as a rule, agreed chiefly on those amusements popularly known to be among the most common, and that the relative number of children mentioning them—*e. g.*, about 67 per cent. in the case of dolls and ball play—is apparently too small; on the other hand, they differed extremely in the less common amusements, as is shown by a total of over 700 different ones mentioned by these 2,000 children, who cite on an average only ten different ones.

These results, then, represent with approximate correctness the general characteristics of the amusements of 2,000 school children in Worcester. Local conditions and other causes in their environment, such as their school life, have undoubtedly influenced their choice of amusements, yet these children repre-

sent average American children, and these results are typical of their normal activity.

## Bibliography.

A few selected titles are here given, but only such as are likely to be most helpful to the reader wishing to make further investigations along this line. Of works descriptive of many of the games mentioned in this article, Newell is, perhaps, the best of any one authority. He gives a good description of many of the traditional games of America; shows how they may vary in detail in different localities, and yet retain the essential features; and he accounts for the remote origin of many amusements. Of similar value is Miss Gomme's Traditional Games of England, Scotland and Ireland. Such general works as Champlin, Cassell, and Routledge's also describe many of these games and some of the other forms of amusement common among the young. Misses Gomme and Willard have each collected a few of the more common singing games of children, giving the music as well as the words. Since Babcock and Culin found in Washington and Brooklyn many of the games now popular in Worcester, their description will be of special interest to the reader of this article.

For the discussion of the theory and psychology of play the reader is referred to Groos, chapters I and V of the Play of Animals and the same author's more recent work, Die Spiele Menschen. Groos gives the fullest and clearest treatment of this subject to be found, and his bibliography in the foot notes is very full. The function of human play is also discussed by Baldwin. The references, already given to Froebel, James, and Wundt, account for some of the different phenomena observable in the play of childhood. Dr. Gulick gives the results of his own careful observations. Newell finds many of these games merely the inheritance of the ceremonies and amusements of adults at an earlier period; Culin associates many of them with the ceremonies of divination; while Taylor sees in these plays and movements of childhood the recapitulation of primitive life and its movements; and Burk in teasing and bullying sees a phase of the same tendency.

La Grange has published what is perhaps the most complete study of physical exercise; while Keating and Ralfe have each put in more popular form the accepted opinions upon the results of physical exercise. Beyer in his study of the cadets at Annapolis has made the most important contribution in English regarding the effect of exercise in growth. The general attitude of those interested in physical training is well seen in the admirable discussion of the different systems of physical culture found in the Report of the U. S. Bureau of Education for

1891–92. A progressive modern view of physical education is given in Dr. Hartwell's paper mentioned in the bibliography. Lesshaft and Bierent touch upon the physiological effects of physical activity during the years of childhood; while Burk's article, From Fundamental to Accessory, presents the more recent opinions concerning the development of the nervous system.

Comenius, Froebel, Richter and many others among the educational writers, have commented upon the peculiar value of play. Froebel more than others has recognized and attempted to take advantage in education of the play instinct. Johnson has gone a step farther in suggesting a much wider use of the game in the school. Sergi and Colozza have studied play from the psychological and pedagogical points of view, and both criticize the artificialities of modern Froebelianism. Hall and Ellis have shown the great role the doll plays in the psychical development of the child, and suggest its use in the schoolroom. Miss Blow upholds the symbolic side of the kindergarten system.

Russell's observations and the accompanying study by Miss Frear deal with imitative play. Strutt and Fettis give excellent pictures of the amusements of England and Scotland in the past. The most complete account of physical exercise and related topics, especially of the German system of gymnastics, is Euler's encyclopædia.

The following brief list of selected titles should be supplemented by reference to the bibliographies of Chamberlain, Johnson, and Miss Sisson, and the Bibliography of Child Study by Louis N. Wilson.

Babcock, W. H. Games of Washington Children. American Anthropologist, July, 1888, Vol. I, pp. 243-284. Also in Lippincott's Magazine, May, 1886, Vol. XXXVII, pp. 239-257.

Baldwin, J. Mark. Social and Ethical Interpretation in Mental Development. A Study in Social Psychology. N. Y., 1897. pp. 574.

Beyer, Henry G. Influence of Exercise on Growth. Jour. of Experimental Medicine, Vol. I, pp. 546–558. Also the Am. Phys. Rev., Vol. I, pp. 76–87.

Bierent, Léon. La Puberté chez l'homme et chez la femme. Paris, 1896. pp. 200.

Blow, Susan E. Symbolic Education. A Commentary on Froebel's Mother-Play. N. Y., 1894.

Bowditch, H. P. The Growth of Children. Report of the State Board of Health of Massachusetts. Boston, 1877.

Burk, Frederic. From Fundamental to Accessory in the Development of the Nervous System and of Movement. *Ped. Sem.*, Vol. VI, pp. 5-64.

—— ——. Teasing and Bullying. *Ped. Sem.*, Vol. IV, pp. 336-371.

CASSELL. Book of Out-door Sports and In-door Amusements, Card Games, and Fireside Fun. London, 1881.

CHAMBERLAIN, A. F. The Child and Childhood in Folkthought. N. Y., 1896. pp. 464. Bibliography, very helpful. See p. 405.

CHAMPLIN J. D., AND BOSTWICK, A. E. The Young People's Encyclopedia of Games and Sports. N. Y., 1890.

COLOZZA, A. Il Giuoco nella Pedagogia. Torino, 1895. Vol. XIV, pp. 288.

COMENIUS, J. AMOS. Comenius's School of Infancy. An essay on education during the first six years. Edited by W. S. Monroe. Boston, 1896. pp. 16-99.

CULIN, STEWART. Korean Games with notes on the corresponding games of China and Japan. Univ. of Penn., Phil., 1895. pp. 36-177. See preface.

—— ——. Street Games of Boys in Brooklyn. Jour. of Am. Folklore, July-Sept., 1891, Vol. IV, pp. 221-237.

ELLIS, A. C., AND HALL, G. STANLEY. A Study of Dolls. *Ped. Sem.*, Vol. IV, pp. 129–175.

EULER, CARL. Encyclopädisches Handbuch des gesamten Turnwesens und der verwandten Gebiete. Wien und Leipzig, 1894. 2 Vol.

FETTIS, ROBERT S. Sports and Pastimes of Scotland. London, 1891. pp. 212.

FREAR, CAROLINE. *Ped. Sem.*, Vol. IV, pp. 382-386.

FROEBEL, FRIEDRICH. The Education of Man. Translated by W. N. Hailmann. N. Y., 1896. pp. 332.

GOMME, ALICE B. Children's Singing Games, with the tunes to which they are sung. N. Y., 1894. pp. 70.

—— ——. The Traditional Games of England, Scotland, and Ireland. London, 1894.

GROOS, KARL. The Play of Animals. Translated by Elizabeth L. Baldwin, with preface by J. Mark Baldwin. N. Y., 1898. pp. 26–341.

—— ——. Die Spiele der Menschen. Jena, 1899. pp. 538.

GULICK, LUTHER. Some Psychical Aspects of Physical Exercise. Pop. Sci. Mo., Vol. LII, pp. 793–808 (Oct. 1898).

—— ——. Psychological, Pedagogical, and Religious Aspects of Group Games. *Ped. Sem., Jan., 1899.*

HARTWELL, E. M. Physical Training. Its Function and Place in Education. Am. Phys. Educ. Rev., Vol. II, pp. 133–154.

JOHNSON, G. E. Education by Plays and Games. *Ped. Sem.*, Vol. III, pp. 132–133.

KEATING, J. M., AND YOUNG, J. K. Physical Development. See Vol. IV, pp. 241–324.

—— ——. Cyclopedia. The Diseases of Children. Phila., 1891.

LA GRANGE, FERNAND. Physiology of Bodily Exercise. N. Y., 1896. pp. 395.

LESSHAFT, P. De l'Éducation de l' Enfant dans la Famille et de sa Signification. Paris, 1894.

NEWELL, WILLIAM W. Games and Songs of American Children. N. Y., 1884. pp. 242.

PARKES, LOUIS C. Hygiene and Public Health. 5th Ed. London, 1891. pp. 557.

RALFE, C. H. Exercise and Training. N. Y., 1894. pp. 96.

Report of U. S. Commissioner of Education, 1891–1892. Vol. I, p. 636. Physical Education 1. Historical Sketch. 2. Essential Features of Principal Systems represented in this country. 3. Suggestions concerning School Gymnastics.

ROUTLEDGE, E. Every Boys' Book: a complete Encyclopedia of Sports and Amusements. London, 1881. pp. 904.

RUSSELL, E. H. Child Observations. First series: Imitation and Allied Activities. Edited by Miss Haskell. Boston, 1895.

SERGI, GUISEPPE. Dolore e Piacere Milano, 1894. XV, 395 pp. Pages 273–284 on Play.

SISSON, GENEVA. Bibliography of Children's Games. In Barnes's Studies in Education. No. 5. pp. 184–189. Sanford University, 1896. Refers to 23 books and articles, and 10 syllabi. Indicates character of each.

STRUTT, JOSEPH. The Sports and Pastimes of the People of England. . . . from the earliest period to the present time. New Edition by Wm. Howe. London, 1845. pp. 420.

TYLOR, E. B. Primitive Culture. N. Y., 1874.

WEST, G. M. The Anthropology of American School Children. International Congress of Anthropology. Chicago, 1894. pp. 50–58.

WILLARD, ELEANOR W. Children's Singing Games. N. Y., 1895. pp. 67.

WILSON, LOUIS N. Bibliography of Child Study. *Ped. Sem.*, Vol. V, pp. 541–589. Contains 641 titles, and is carefully indexed for convenient reference.

# STATUS OF CHILD STUDY IN EUROPE.[1]

By WILL S. MONROE, State Normal School, Westfield, Mass.

It has seemed to the president of the child study department not inappropriate to present at this time a few facts bearing upon the status of the child study movement in some of the countries of Europe. In Great Britain, in France, in Germany and in Italy, advocates of child study have organized to an extent that is astounding to the most ardent supporters of the movement in America, where, more than anywhere else, child study has assumed commanding prominence, as a vital educational question. Workers in the foreign fields have kindly responded to requests for information regarding the status of the movement in their respective countries; and the hope has been expressed by a number of the friends of the cause abroad, that, at the great exposition to be held at Paris a year hence, there may be some formal organization of an international character. Some affiliation of the workers would unquestionably be helpful to all concerned; and it is to be hoped that the American friends of child study may not be remiss in co-operating with our friends and co-workers abroad in instituting such an international association.

## GREAT BRITAIN.

The following communication from Miss Kate Stevens, the honorable secretary of the London branch of the British Child Study Association, gives a clear notion of the child study activity now so marked in educational circles in Great Britain:

In 1893 several English and Scotch teachers visited the International Educational Conference at Chicago as delegates. Some of these delegates became greatly interested in the work of Child Study, as there conducted by Dr. G. Stanley Hall. After further enquiry into the subject, and a visit paid by Miss Mary Louch of the Ladies' College, Cheltenham, to the Summer School of Clark University in 1894, it was resolved by Miss Louch, Miss Margaret A. Clapperton, of Edinburgh, and Miss Mary E. Crees, of London, to found a British Child Study

[1] President's address before the Child Study Department of the National Education Association at Los Angeles, California, July 12th, 1899.

Association. Advantage was taken by these delegates of the Summer Meeting at Edinburgh, in 1894, to explain the work and aims of the association to a number of people interested in education who were there assembled; and, as a result, the British Child Study Association was formed August, 1894, in Edinburgh, with Miss M. A. Clapperton as Honorable General Secretary.

Branches were shortly afterwards founded by Miss Louch in Cheltenham and Miss Crees in London. Subsequently branches were formed in Derby, Newcastle-on-Tyne, Manchester and Birmingham. The total number of members is upwards of 600.

The aim of the association is to interest parents, teachers and others in the systematic observation of children and young people, with a view to gaining greater insight into child nature and securing more sympathetic and scientific methods of training the young.

In 1898, chiefly through the initiative of President Holman of the London Branch, in co-operation with the various Honorable Secretaries, the Central Association, together with the Branches, was reorganized on a constitutional basis. A strong and influential central organization was formed, consisting of the following officers: President, Dr. T. S. Clouston (Edinburgh); Vice-Presidents, J. Adams, Esq. (Aberdeen), Professor P. Geddes (Edinburgh), Professor Alexander (Manchester), M. W. Keatinge, Esq. (Oxford), Miss D. Beale (Cheltenham), Professor Lloyd Morgan (Bristol), Mrs. Sophia Bryant (London), Dr. G. E. Shuttleworth (London), Professor Earl Barnes (America), Professor James Sully (London), Dr. Langdon-Down (London), Dr. Geo. Wilson (Edinburgh); Chairman of Council, Henry Holman, Esq., H. M. I. (Education Dept.); Hon. General Secretary and Treasurer, Mrs. R. Langdon-Down. Each branch manages its own local affairs through a committee, and also sends delegates to the Central Council.

Early in 1899 it was resolved that the association should found a magazine, as the organ of the British Child Study Association, and to be a medium of communication between the various branches. The magazine, entitled "The Paidologist," is to be issued thrice yearly, on April 1st, July 1st and October 1st; price 6d. each issue; Editor, Miss Mary Louch, 7 Cambray House, Cheltenham, England. A start has been made in gathering together data from various grades of schools by teachers and others for collation; which is being undertaken by several members of the association, who hope in due course to present the result of these studies before the association.

The British Child Study Association owes much of its inspiration and guidance in this field to Professor Earl Barnes, of

America, who has afforded invaluable help. The affiliated branches of the British Child Study Association are as follows:

| Branch. | No. of Members. | Honorable Secretary. |
|---|---|---|
| Cheltenham, | 170, | (1) Miss Mary Louch,<br>(2) Miss R. Rooney,<br>The Ladies' College,<br>Cheltenham. |
| London, | 131, | (1) Mrs. R. Langdon Down,<br>(Also Hon. Gen. Sec.)<br>81 Harley Street,<br>London, N. W.<br>(2) Miss Kate Stevens,<br>Carlisle House,<br>Dartmouth Park Hill,<br>London, N. W. |
| Edinburgh, | 113, | Miss M. A. Clapperton,<br>2 Granton Road,<br>Edinburgh. |
| Newcastle-on-Tyne, | 90, | Miss M. S. Spivey,<br>Estington Tower,<br>Newcastle-on-Tyne. |
| Derby, | 45, | Miss C. H. Baker,<br>The High School,<br>Derby. |
| Manchester, | 30, | Miss Dendy,<br>8 Brook Street,<br>Fallowfield, Manchester. |
| Birmingham, | 25, | Miss A. J. Dawes,<br>44 Princess Road,<br>Egbaston, Birmingham. |

## France.

The recent exhaustive studies of fatigue made by Professor Alfred Binet and M. Victor Henri are certainly familiar to American child study friends. Other studies, not unlike those made in the schools of New Haven by Professor Scripture, are now being made in the public schools of Paris. A recent movement in France, which seems to be assuming important dimensions, centers about the study of abnormal children. The *Revue internationale de Pédagogie comparative*, an excellent monthly edited by Auguste Mailloux at Nantes, is published in the interest of this movement. Judged by the reviews, most of the activity in child study matters in France, has

started from Lyons and been initiated by M. Gabriel Compayré, so well and so favorably known to American teachers, and the author of an important study of the child. The following letter from M. Compayré indicates briefly the present status of the movement in France. "I have but little news to give you of child study in France, as we are far behind you. I send you the result of a preliminary inquiry with four hundred pupils of primary schools in the precincts of Lyons. We commence this inquiry by suggesting a competition among the pupils of all the schools upon the same subject of French composition. The last subject proposed was this: 'Tell what you know of electric railways.' Lyons boasts of being the French capital of railways. This inquiry is not yet completed.

"My other slighter investigation which I am just beginning, but which promises some interesting results, is like this: I go into a kindergarten, have paper and pencils distributed to the children and ask them to draw for a half hour whatever they fancy; or I direct them to draw according to an outline which I give,—a man, a woman, a child, a young man, a full face, a profile, etc.

"Then again, M. Chabot has given the instructors and the public institutions of Lyons and its suburbs a *questionnaire*, on different points of pedagogical psychology. I send you this *questionnaire*, to which we have some replies already. You see that we are commencing to emulate you and to be inspired by your excellent endeavors.

"As to the rest of France, I observe but too little effort as yet. At Lille, the university has set up this year, a laboratory of education supervised by Professor Lefaire. About what is done at Paris at the laboratory of physiological psychology, under the direction of Professor Alfred Binet, *l'Année Psychologique*, whose fourth annual has appeared and with which you are doubtless familiar, will inform you very well." Since the receipt of M. Compayré's letter, the *Manuel général de l'instruction primaire*, edited by M. Ferdinand Buisson, Professor of pedagogy in the University of Paris, and well known to Americans, announces a call for the organization of a national child study society in France.

## Italy.

Miss Paola Lombroso, daughter of the eminent anthropologist, has been one of the most active child study workers in Italy. Her investigations, "Essays in Child Psychology," were published at Turin, in 1894. Among the topics discussed are: Mental development, morals, play, writing, composition, etc., while the value of the work is enhanced by the addition of twelve monographs upon children personally known

to and observed by the author. Miss Lombroso's book worthily extends the field of investigation opened by Ferri's earlier essays. Other studies of more or less psychological interest are those of Anfosso on "Honesty in Children" (1897), Gelmini on "Children's Lies" (1894), Sergi's "Studies of the Sense of Order in School Children" (1898), which have appeared in various educational and scientific periodicals from time to time. Much of the work of Vitali also has been psychological.

Colozza's work on "The Psychology and Pedagogy of Play" (Turin, 1895,) treats the subject from the historical and psychological pedagogical points of view, discussing the various theories as to the nature and original significance of play, and reaching in conclusion two pedagogical laws, *viz.*, the teacher must not hurry on the appearance of play and a change to play of a different sort, not absolute rest, is necessary when children tire of a given play. Colozza's book is full of interest for the teacher, and he sympathizes more or less with those who seek to relieve the kindergarten of the marionettism which is so often associated with it—the *child himself* should play. Colozza has also published a study of "Inhibition" (1898).

Riccardi's "Anthropology and Pedagogy," of which only the first part has as yet appeared (Modena, 1892,), is the most ambitious contribution of the kind, dealing with the sociology of the child in and out of school. Altogether Riccardi has made 100,000 observations on over 2,000 pupils from seven to eighteen years of age in the schools of Modena and Bologna. The volume under discussion is concerned with social condition of children and parents, moral education and its effects, moral environment, family influence, interest of parents in the school, degeneracy, only children, intelligence, temperament, studiousness, attention, ambition, vanity, pride, study-preference, in all their varied relationships with each other. For Riccardi, the school is a little human society, and the children who pass into it ought to receive the best heredity the race can give. Much and most efficient work in Italy has also been done by Martino Beltrani-Scalia in the study of the physical and mental conditions of juvenile delinquents and of abandoned and neglected children. His investigations have been sociological as well as psychological.

Ottolenghi's studies on "Sensibility and Age" (1895) have shown the increase of sensibility with age and the apparent less sensibility of women. Garbini, whose study of the "Infant's Voice" appeared in 1892, has since published elaborate investigations of the "Evolution of the Color Sense" (1894), and "Evolution of the Sense of Smell" (1896). As to color sense, Garbini studied 557 children from three to six years of

age, and as to the sense of smell, 415 children of ages between three and six, the general results of all his investigations being to confirm the idea of the recapitulation of the racial history by the individual.

The most interesting of recent Italian studies in the motor field is Obici's investigations on the "Embryology of Writing" (1898), based on the school exercises of twenty-five children of both sexes in two Italian schools, from the day of entering to that of leaving. Children seem to err most in excess of movement.

Besides the extensive studies of the criminological school of Lombroso, its advocates and opponents, which have contributed so much to our knowledge of defective children and youth, the labors of Mosso, Pagliani, Livi, Riccardi, Mantegazza, Morselli, Regalia, and Sergi, have made Italian anthropological science familiar to the world outside during the past quarter of a century. Livi's monumental study of Italian soldiers appeared in 1894, since which time several investigations more akin to the child-study movement in America have been reported. The chief of these are Dr. G. Marina's "Anthropological and Ethnographic Studies on Boys" (Turin, 1896,), and "Anthropological Studies on Adults" (Turin, 1897,) and Professor Vitali's "Anthropological Pedagogical Studies" (2 vols., Forli, 1896, Turin, 1898,). Professor Vitali's investigations (anthropometric, psycho-physical, mental constitution, character, etc.,) are in the nature of a parallel study of 303 boys and 372 girls, between the ages of eleven and twenty, belonging to the district of the Romagna, and are a distinctively new contribution to the study of sex in childhood and youth. As a result of his investigation, Professor Vitali expresses himself as strongly in favor of co-education, and the production of mothers who have not ceased to grow or to learn. Dr. Marina's researches, besides giving a general *résumé* of the subject, treat in detail of over 22,000 boys (between ten and twenty years of age) and nearly 23,000 adults (from twenty to forty years), the great majority of both being Italians. Dr. Marina, as a result of his researches, refuses to believe in the existence of a criminal type anatomically characterized, and warns against the dogmatism that sees everything in one or two anatomical or physical characteristics.

Marro's comprehensive study of "Puberty in Man and Woman" (Turin, 1898,), contains a mine of valuable information, largely based on personal investigation and research, about all phenomena of sex and sexuality.

Rising above the host of pamphlets and articles which have appeared in the last few years, Ferriani's study of "Juvenile Criminals" (Turin, 1895,), which has since been translated into German, sums up the data concerning the child in relation to

crime and the criminal in an able and convincing manner. While not a hide-bound Lombrosan, Ferriani certainly sees more innate evil in the child than most German and American anthropologists seem willing to discover. Details of the criminal acts and tendencies of 2,000 young criminals coming under the observation of the author are given, and the book is one of profound interest altogether. Ferriani holds that with few exceptions the criminal carries the germ of his criminality with him out of childhood, and that during that period environment of good is of inconceivable power.

Mosso's "Physical Education of Youth" (Turin, 1894,), which has been translated into several European languages, is in many respects the best book extant on the subject of which it treats. Physician, physiologist, educator,—the author is perhaps the ablest defender of the natural method of gymnastics, free air, free limbs, free action. Most valuable, also, is the "Report of the Commission on Physical Education" (Rome, 1893,), the recommendations of which run largely in the direction of Mosso's views, the latter having, with many other distinguished men, served on the commission. Nature's methods (plays and games) are to be preferred, whenever possible.[1]

## Germany.

American students of childhood will always owe Germany a large debt of gratitude for the splendid labors of the late Professor Preyer, the sense of whose loss is still so fresh upon us. The following communication from Dr. J. Stimpfl, professor in the State Normal School at Bamberg (Bavaria), indicates what is being done in Germany. Dr. Stimpfl, it should be noted in passing, besides having translated Sully's "Studies of Childhood" and Tracy's "Psychology of Childhood" into German, has made numerous and most acceptable contributions to the literature of pedagogy and cognate subjects in the professional reviews of his own country. He writes: "Interest in the study of child mind has increased with both psychologists and educators from year to year, and in North America in particular much has been accomplished. But the cradle of this rapidly developing science was in Germany. Here, as early as 1787, the German philosopher Dietrich Tiedemann published his "Observations on the Development of the Minds of Children." This valuable contribution to empirical psychology, however, was quite neglected, and more than half a century passed before another important work on the psychol-

[1] I am under great obligations to Dr. Alexander F. Chamberlain, of Clark University, Worcester, Mass., for notes on the status of child study in Italy.

ogy of childhood appeared. In 1850, Berthold Sigismund, a German physician, published his "Child and the World," whose fate was not unlike that of Tiedemann's book.

Three decades later followed the classical work by the well-known physiologist, Wilhelm Preyer: "The Mind of the Child." This book, however, has been much less influential in stimulating investigations in Germany than in foreign countries. In 1893, Preyer published a summary of his detailed and comprehensive study under the title: "Mental Development in the First Years of Childhood." Considering the wide circulation which the writings of this famous physiologist have had in the United States, it may seem altogether superfluous to mention him as a pioneer in this field.

Within ten years School Superintendent Christian Ufer has been especially zealous in arousing a deeper interest in child study in Germany. His important translations of child study literature into German have included "The Lies of Children" by G. Stanley Hall; "Differences between Normal and Abnormal Children" by Josiah Royce; "The Beginning of the Child's Mental Life" by Bernard Perez, and "Morality of Children" by Albert Schinz. He has also rendered important service to the child study cause by editing the writings of Tiedemann and Sigismund. As associate editor of *Die Kinderfehler* as well as in the contributions to child study (Beiträge zur Kinderforschung), he has given evidence of warm enthusiasm and comprehensive views of childhood. His own original investigations —for example: "Characteristics of the Feeble Minded," "Feeble Minded Children in the Schools," "Mental Types and Related Phenomena," as well as the excellent article on "Child Study" in Rein's Encyclopædia of Pedagogy—give him a recognized place as a capable investigator of child nature.

Quite recently two comprehensive and original works have appeared that are of great significance to child-study interests in Germany. In a most formidable work of more than five hundred pages Professor Karl Groos, the Basel philosopher, has treated of the plays of men, with special reference to play activities during childhood. The first section of his book, treats of the play activities of the sensory and motor apparatus, and of the higher mental qualities. The second part treats of contest, love, imitation and social plays. The point of view of Professor Groos is entirely new. He maintains that the play of youth depends on the fact that certain instincts, especially useful in preserving the species, appear before they are seriously needed, and that they are, in contrast with later serious exercise, a *preparation* and *practice* for special instincts.

William Ament has also published a noteworthy book in his "Development of the Thoughts and Speech of Children." He

has employed Preyer's method in his investigation, and his book rightly claims to represent a new and independent approach to child psychology. He outlines for the first time a complete grammar of the child's language and clearly shows that the child's early thinking can be referred back to the principles of association and reproduction. This work, like that by Groos, is of the utmost importance in the sphere of child study.

The continually growing interest in child study has brought about the translation of a considerable number of foreign child study books into German: Sully's "Studies of Childhood," translated by the writer in 1897; Baldwin's "Mental Development in the Child and the Race," translated by Dr. Ortmann in 1898, and Tracy's "Psychology of Childhood," translated by the writer the during present year.

The child has been exhaustively studied from the pathological point of view—first by the aged philosopher and pedagogue, Professor Ludwig Strümpell in his able work published in 1890 entitled: "Pedagogical Pathology, or Teachings from the Faults of Children." A work of no less importance as a pioneer in the study of pathological conditions is that by the alienist Dr. Julius Ludwig August Koch. Although concerned primarily with the study of adults, his work touches at many points the pathology of childhood. His labors have since been ably supplemented, in their applications to children, by Director Johann Trüper, both in his publications and the organization of an educational institution at Sophienhöhe (near Jena) for the care and training of backward and mentally deficient children. He is also one of the co-editors of *Die Kinderfehler*. Gustav Siegert, of Leipzig, has also made important contributions to the study of abnormal children. Besides his three large works: "Problematic Child Nature," "Periods in the Development of the Child," and "The Problem of Child Suicides," he has contributed numerous valuable short articles to Rein's Encyclopædia of Pedagogy.

Besides *Die Kinderfehler*, there are two other German reviews devoted especially to child study. In the "Sammlung von Abhandlungen aus dem Gebiete der Pädagogischen Psychologie und Physiologie," edited by Herman Schiller and Theodore Ziehen, several contributions have been made to child study, and notably Professor Ziehen's "Association of Children's Ideas." Since the first of the present year Dr. Ferdinand Kemsies has published an excellent review, devoted to the study of both normal and abnormal children, entitled "*Zeitschrift für Pädagogische Psychologie.*"

At the forthcoming summer session of the University of Jena, Superintendent Christian Ufer will give six lectures on "Child Psychology from the Pedagogical Standpoint," and Director

Johann Trüper will offer six lectures on "Abnormal Children and their Educational Treatment." It is the intention to form at Jena during the session of the summer school an association for the study of children.

On the whole, however, and especially when compared with the activities in the United States, Germany lags in the rear of the great child study movement. This state of affairs is explained largely by the fact that the German universities (with the single exception of the University of Jena) have no practice schools connected with their departments of pedagogy. The lectures on pedagogy are given as secondary subjects by professors of philosophy, philology, and theology. And in the German normal schools one finds scarcely less attention given to the study of children than in the universities.

Thus, it will be seen, that the interests represented by this department of the National Education Association, have numerous representatives in the old world; although the present report on the status of child study in Europe is only partial—no attempt being made to include the accounts of the scattered movements in a half dozen countries outside of Western Europe.

# BACTERIOLOGICAL STUDY OF SCHOOL UTENSILS.

By Dr. Mary L. H. Arnold, State Normal School,
San Jose, California.

During the last ten years, bacteriology has been demonstrated to be one of the most essential studies in investigations of disease, and bacteria have been shown to be the cause of the majority of diseases most dreaded by the human race, hence the relation of bacteriology to school hygiene is a point of vital interest not only to every child, but to parent, teacher, physician, and the community at large.

In January, 1897, I had made for me at the Z school, in a prominent city of California, a small jar from clay used for modeling purposes by the pupils in the public schools of that city. The model I secured was carefully placed in a sterilized test tube by means of thoroughly sterilized forceps. Later inoculations were made, followed by plate and tube cultures. As no investigation, to my knowledge, had been made in clay used for model work, I had nothing on which to base any idea as to developments.

The first piece of clay examined was from a school attended by a favored class of children, so I naturally expected but little. But on one plate culture one hundred and forty-three colonies were noted. A study was made of fifteen different micro-organisms, and fourteen other kinds were observed. The second piece of clay examined came from a school attended by the poorer class of children. In less than eleven days a plate culture showed one hundred and twenty-seven colonies, and tube cultures were made of nine.

In clean clay that had not been used by the children, study was made of five colonies, and in addition 21 different colonies were noted.

The clay having been secured in a sterile manner, and the growth of colonies having been so marked and rapid, it clearly demonstrated that clay is a well beloved home for micrococci, bacilli, oidiums. It was an absolute impossibility to secure even one pure culture from a plate culture from the first specimen made thirty-four days after the specimen was secured.

Among the colonies was one, probably the Bacillus spiniferus,

[1] Summary of an Inaugural Dissertation. Cooper Medical College, San Francisco, California.

found on the surface of the body in cases of eczema seborrhoeicun, another resembled the Diplococus Albicans tardus, and a third was the Oidium Albicans, the cause of thrush. It has a predilection for feeble children, and from a medical standpoint many children in large schools have constitutions inviting the invasion of such a micro-organism. If clay furnishes a source of germ development, it is more than probable that it would be a suitable camping ground for vegetable parasites as trichophyton tinea,—tinea tonsurans,—and tinea circinata.

On January 14th, 1897, I secured a lead pencil from the X school. The pencil was from a box containing pencils that had been collected from a class. They were kept by the teacher until used the next day. Plate and tube cultures were made from it. Great were the surprises which that harmless lead-pencil had in store.

A common practice, saving time and money, is to collect pens, pencils, and even penholders and have them kept by the teacher until used once more.

In a single plate culture from that pencil I counted 500 colonies. At least 900 or 1,000 colonies covered the Petri dish. Studies of thirteen colonies demonstrated bacilli and micrococci.

The majority of people would certainly go out of their way to avoid germs, even mythical as they are to many of the laity, yet their children meet hot beds for germ development in such pencil boxes as the one from which I secured my sample. One of the first impulses of a child when handling a pencil is to put it in the mouth. Tuberculosis, a disease dreaded by all; a disease which even legislation has considered worthy of attention; a disease owing its virulence to the tubercle bacillus, is transmitted in dried sputum. Legislation has called the attention of the public to the disease from a bacteriological standpoint, yet in the schoolroom, a second home for children, nothing has been done to prevent its spread. Since the pencil has been demonstrated to be a germ house, every pencil from the mouth of a tuberculous child is a source of the disease.

In buccal secretions, the Bacillus of tuberculosishas many formidable associates, the following being the most highly honored, the Bacillus of Friedländer, the cause of pneumonia, the Micrococcus pneumoniæ crouposæ, Bacillus Afanassiew, supposed cause of whooping-cough, Staphylococcus salivarius pyogenes, noted in an abcess from subcutaneous injection of saliva from a child suffering from scarlatina anginosa, Micrococcus tetragenus common in phthisis, Micrococcus of Manfredi from sputum of croupous pneumonia following measles, Micrococcus gingivæ pyogens and Bacillus of diphtheria. Sixteen other pathogenie and forty-eight non-pathogenic bacteria complete the residents of the buccal cavity. Such are the formidable

enemies liable to be on the pencil of some innocent child. Then again, many a school child has a contagious eye disease and often pauses in his task to rub his eyes with his fingers, then uses his pencil, wholly oblivious of the hidden danger in his pencil, to the hands and eyes of his playmate.

Each year large sums of money are expended in the United States in the teaching of calisthenics in our schools. These exercises, when properly taught, are most excellent, but are now given almost invariably in a room laden with not only germs found in atmosphere and dust, but also with the micro-organisms of chalk dust. In my study of chalk, cultures were made of five colonies, one of which was probably Bacillus Venemosus, one was a micrococcus, and the rest were bacilli. I should not be surprised if in time a bacterium producing eczema be found to have its home in crayon, for I have known cases of eczema to follow the use of crayon, and from many years experience as a mathematical teacher, I know it to be a great irritant of throat, lungs and eyes, more so, I think, than its chemical nature warrants. The piece of chalk I examined was from a room in the high school where I taught. As a rule the students belonged to people who pay attention to hygienic laws. What might we expect from a piece taken from a room in the lower grades where oft times it is collected each day!

If but due attention were paid to physical and hygienic conditions in schools, the rising generation would almost double its usefulness in the home, the school, and the world at large. The first law of hygiene is pure air and healthy environment. The results of this study show that care must be taken for the disinfection and cleanliness of school utensils. Clay is a germ hot-house. If it *must* be used, sterilize it daily for three successive days. Sterilize crayon in the same manner. If pencils and penholders *must* be collected, let them be sterilized each night. To the rules regulating the spreading of contagious and infectious diseases, add another making it compulsory that each child be provided with his own crayon, lead pencil, slate pencil, penholder, blackboard eraser, drinking cup, and if clay modeling be a part of the school work, his own clay.

## Characteristics of the Cultures.

*No. 5. Habitat-clay. Gelatine culture.* Non-liquefying facultative anærobic. White surface growth. Stalk with radiations.

*Potato culture.* Dirty white, feathery, dry looking. Oidium projections.

*Agar-agar culture.* Very little growth,—white. Very large oidium. Oidium albicans.

*No. 9. Habitat-clay. Gelatine culture.* Plate culture,—brown pink, later orange color. Dim edge surrounding a ring of deeper color, which in turn surrounded a dim center. Non-liquefying. Test tube culture. Non-liquefying, facultative anærobic.

*Potato culture.* Deep red, orange tinge. *Very* slow growth.

*Agar-agar culture* Orange-red colony in streaks formed of drops on surface of media. Thin membrane-like blade in media. Motile micrococcus.

*t. Habitat-clean clay. Gelatine culture.* Plate culture. Light brown,—green colony, dim edge, nucleated center. Test-tube culture,—non-liquefying, chromogenic, facultative anærobic.

*Potato culture.* Deep mustard-yellow mass, lightest near the edge. Smooth, glistening surface.

*Agar-agar culture.* Non-transparent yellow mass, surrounded by a transparent pellicle. Later was yellow on surface and in media.

Motile bacillus. Later culture showed bacillus of different arrangement.

*k. Habitat-lead-pencil. Gelatine culture.* Plate culture,—circular, light canary-yellow colony. Test tube culture,—liquefying anærobic.

*Potato culture.* Thick colony, compact, yellow. Later it was yellowish green. Consistency of very thick cream. Would stretch, but would not adhere to needle.

*Agar-agar culture.* Small white streak at site of puncture.

Very small, motile bacillus.

*m. Habitat-lead-pencil. Gelatine culture.* Plate culture,—pure white. Grew in myriads. Test tube culture,—facultative anærobic, at first non-liquefying, later slowly liquefying.

*Potato culture.* Pure white.

*Agar-agar culture.* Milk-white, tinged surface growth.

Very small bacillus.

*No. V. (Bacillus Abramsi) Habitat-chalk. Gelatine culture.* Plate culture,—dim, irregular colony with flat, uneven surface. Growth in test tube,—non-chromogenic, non-liquefying, facultative anærobic. At first, surface growth was colorless, later almost white, and resembled ground glass. Long dotted transparent compound stalk with fringed edge was in the media.

*Potato culture.* Most peculiar liquid dirty-white colony.

*Agar-agar culture.* Watery-white surface growth of dim dots of varying size and density. Transparent, membranous stalk in media.

Slightly motile bacillus.

# BIBLIOGRAPHY OF CHILD STUDY

## For the year 1898.

By Louis N. Wilson, Librarian, Clark University.

1. **Adsersen, H.** (On growth in height and mental derangements in childhood.) Nordiskt Med. Arkiv. 1898. Vol. 31, pp. 39.
2. **Aicard, Jean** L'âme d'un enfant. E. Flammarion, Paris, 1898. pp. 384.
3. **Alden, Annie Fields** My Collection of Dolls. Ladies' Home Journal, Nov., 1898. Vol. 15, p. 17; Dec., 1898; Jan., 1899. Vol. 16, pp. 13 and 19.
4. **Allport, Frank** The eyes and ears of school children. Reprint. The author, 92 State St., Chicago, Ill. pp. 30.
   Contains, also, articles on Refraction in Schools; Defective Eyesight in American Children; Tests for Defective Vision in School Children; Physical Defects in Pupils.
5. —— —— Report of eye examinations in the Minneapolis public schools. Jour. of Am. Med. Ass., 1898. Vol. 30, pp. 207-211.
6. **Altenburg, Oskar** Die Kunst des psychologischen Beobachtens. Praktische Fragen der pädagogischen Psychologie. Samml. v. Abh. a. d. Geb. d. Päd. Psy. u Physiol. Band 2, Heft 3, 1898. pp. 76.
   Contains interesting items concerning the effect of environment, family life, etc., on the child before entering school.
7. **Alvarez, B. Gonzales** Anatomia y fisiologia especiales del niño de su alimentacion y crecimiento y preliminares de clinica pediátrica. Carrion Hermanos, Madrid, 1895. pp. 344.
   A good *résumé* of the anatomy and physiology of childhood, with original contributions. The best book in Spanish on the subject.
8. **Aly, Max Voigt** Die Welt im Munde. Frankfurt, A. M., 1898. pp. 87.
   Practical rules for the care of the teeth and mouth.
9. **American, Sadie** Child training by the Froebel system. The Woman's Home Companion, N. Y. Sept., 1898. Vol. 25, No. 6, p. 12.
10. —— —— The movement for small play grounds. Am. Jour. of Sociology, Sept. 1898. Vol. 4, pp. 159-170.
11. —— —— The movement for vacation schools. Am. Jour. of Sociology, Nov., 1898. Vol. 4, pp. 309-325.

12. **Atkinson, Fred. W.** A year's study of the entering pupils of the Springfield, Mass., high school. Proc. N. E. A., 1898. pp. 903-910.
A suggestive application of child study to secondary education.

13. **Austin, Ellen M.** Child study in the high school. North Western Monthly, March, 1898. Vol. 8, pp. 487-490.

14. **Baginsky, Adolf and Janke, Otto** Handbuch der Schul-Hygiene zum Gebrauche für ärme Sanitätsbeamte, Lehrer, Schul-Vorstände und Techniker. F. Enke, Stuttgart, 1898. Vol. 1, pp. 748.

15. **Bailey, T. P.** Child Study and Ethology. North Western Monthly, Nov. 1897; Jan. 1898. Vol. 8, pp. 250-256; 370-375.

16. **Baker, Seth** Fatigue in school children. Ed. Review, Jan., 1898. Vol. 15, pp. 34-39.
A brief statement of some of the premonitions of fatigue.

17. **Baldwin, J. Mark** The story of the mind. D. Appleton & Co., N. Y., 1898. pp. 236.
The fourth chapter discusses the mind of the child.

18. **Balliet, Thomas M.** Value of motor education. Jour. of Education, Nov. 17, 1898. Vol. 48, p. 317.

19. —— —— School Baths. Jour. of Education Oct. 20, 1898. Vol. 48, pp. 251-252.

20. **Barnes, Earl** Childish ideals. North Western Monthly, Oct., 1898. Vol. 9, pp. 91-93.
One of the very few comparisons between the English and the American child that are of any value.

21. —— —— The way young children think: a study of their pictures. Child Life (London), June, 1898. Vol. 1, pp. 120-122.
Application of recent studies in children's drawings to the Kindergarten.

22. —— —— Effect of social ideas on choice of occupation. Jour. of Education, Sept. 8, 1898. Vol. 48, pp. 155-156.
A brief study of the ambitions of English school children.

23. —— —— Corporal punishment in England. Education, Oct., 1898. Vol. 19, pp. 72-75.
Corporal punishment discussed with special reference to juvenile delinquents.

24. —— —— Corporal punishment as a means of social control. Education, March, 1898. Vol. 18, pp. 387-395.
A study of discipline in English schools.

25. **Barr, M. W.** The training of mentally deficient children. Pop. Sci. Mo., Aug., 1898. Vol. 53, pp. 531-535.

26. **Bastian, H. C.** Aphasia and other speech defects. Lewis, London, 1898. pp. 314.

27. **Baumann, Julius** Ueber Willens—und Characterbildung auf physiologisch—psychologischer Grundlage. Samml. von Abh, a. d. geb. d. Paed. Psy. u. Physiol. Vol. 1, Hft. 1. Reuther u. Reichard, Berlin, 1897. pp. 86.

28. **Bayr, Emanuel** Über Beleuchtungsversuche in Lehrzimmern. Zeit für Schulgesundheitspflege, March, 1898. Vol. 11, pp. 129-160.
An exhaustive study of the lighting of school rooms.

29. **Beach, Fletcher** Insanity in children. Jour. of Mental Sci., July, 1898. Vol. 44, pp. 459-473.

30. **Beale, Dorothy** (and others) Work and play in girls' schools. Longmans, Green & Co., London, 1898. pp. 433.
A comprehensive presentation of the ways and means of educating maturing girls.

31. **Bellianine, C.** Troubles de la parole dans l' hémiplégie infantile. Maloine, Paris, 1898. pp. 33.

32. **Bergen, F. D.** Notes on the theological development of a child. Arena, 1899. Vol. 19, pp. 254-266.

33. **Bergey, D. H.** School architecture. Heating, ventilation, lighting, and sanitary arrangements. Proc. N. E. A., 1898. pp. 524-534.

34. **Berthelemy, H.** La répression des violences commises envers les enfants. Rev. Pédagogique, April, 1898. Vol. 32, pp. 289-302.

35. **Binet, A., et Henri, V.** La fatigue intellectuelle. Schleicher Freres, Paris, 1898. pp. 338 and 3 plates.
An excellent presentation of the physiological and psychological effects of mental overwork; presents the results of many investigations carried on in France, Germany, Italy, and America.

36. **Binet, A., and Vaschide, N.** La psychologie à l'école primaire. Expériences de force musculaire et de fond chez les jeunes garçons. Épreuves de vitesse chez les jeunes garçons. Expériences sur la respiration et la circulation du sang chez les jeunes garçons. Mesures anatomiques chez 40 jeunes garcons. Échelle des indications données par les différents tests. Corrélation des épreuves physiques. La mesure de la force musculaire chez les jeunes gens. La force de pression de la main, la traction, la corde lisse, le saut. Expériences de vitesse chez les jeunes gens. Données anatomiques, capacité vitale et vitesse du coeur chez 40 jeunes gens. Échelle des indications données par les tests. Corrélation des tests de force physique. Année Psychol., 1897. Vol. 4, pp. 1-244.

37. **Bluhm, R.** Die Schulsparkassen in Frankreich. Deuts-Zeits, f. Ausl. Unterr, Jan., 1898. Vol. 3, pp. 115-125.

38. **Blum, E.** Le mouvement pédologique et pédagogique. Rev. Philos., Nov. 1898. Vol. 46, pp. 504-518.
Review of literature of child study.

39. **Boas, Franz** The growth of Toronto children. Report Comm. of Ed., 1896-97. Washington, 1898. Vol. 2, pp. 1541-1599.
Besides giving the growth of the Toronto children the paper discusses the influence of the order of birth on development.

40. **Bohannon, E. W.** The only child in a family. Ped. Sem., April, 1898. Vol. 5, pp. 475-496.

41. **Bolton, T. L., and Haskell, Ellen, M.** Knowledge from the standpoint of association. Ed. Review, May, 1898. Vol. 15, pp. 474-499.

42. **Bon, L. C.** Les châtiments corporels dans les écoles allemandes. Rev. Pédagogique, Jan., 1898. Vol. 32, pp. 59-65.

43. **Bradford, E. H.** (and others) The education of crippled children. American Physical Education Review, September, 1898. Vol. 3, pp. 188-207.
A series of articles on the care and training of deformed and crippled children.

44. **Brauckmann, K.** Behinderte Nasenatmung. Rein's Ency. Handb. d Pädagogik. Vol. 5, pp. 6-12.

45. ——— Ohrenkrankheiten. Rein's Ency. Handb. d Pädagogik. Vol. 5, pp. 121-124.

46. **Brinton, D. G.** The factors of heredity and environment in man. Am. Anthropologist, Sept., 1898. Vol. 11, pp. 271-277.
Gives an excellent idea of the disagreement of eminent authorities as to the rôle of these factors. Emphasizes the *rôle* of character and temperament.

47. **Brodeur, Clarence A.** Child study in Westfield and vicinity. Jour. of Education, Jan. 6, Jan. 20, Feb. 3 and March 17, 1898. Vol. 47.

48. **Brower, Daniel R.** The judicious training of neurotic children an aid to the prevention of insanity. Proc. of the Am. Med.-Psy. Assn. 54th annual meeting, St. Louis, Mo., May 10-13, 1898. Vol. 5, pp. 143-146.

49. **Brown, Ernest N.** Child study. Educational Record, Province of Quebec, Montreal, March, 1898. Vol. 18, pp. 51-63.
Discusses the subject from the teachers' point of view.

50. **Bruns, L.** Hysteria in children. Alienist and Neurologist, July, 1898. Vol. 19, pp. 373-430.

51. **Bryant, Sophie** The teachings of morality in the family and school. Macmillan Co., N. Y., 1897. pp. 146.
Very general.

52. **Bucher, M. K.** Arbeit und Rhythmus. Allg. Phil. Hist. Classe Sächs. Ges. der Wiss. Bd. 17, No. 5, Leipzig, 1896. pp. 130.
An important and fascinating monograph. Rhythm is born of the "intoxication of work."

53. **Buchner, E. F.** Reports of child study at state teachers' associations. North Western Monthly, Feb., 1898. Vol 8, pp. 429-431.

54. **Buck, Winifred** Boys' Clubs. N. A. Review, Oct., 1898. Vol. 167, pp. 509-512.

55. **Buisson, F.** L'école primaire en France et la part de responsibilité dans l'éducation morale du pays. Rev. Pédagogique, Feb., 1898. Vol. 32, pp. 121-134.

56. **Burk, Frederic** The graded system vs. individual pupils. North Western Monthly, March, 1898. Vol. 8, pp. 481-484.

57. —— —— Growth of children in height and weight. Am. Jour. of Psy., April, 1898. Vol. 9, pp. 253-326.
An excellent summing up of work done in this field. Gives a bibliography of 109 titles.

58. —— —— Physical measurements. North Western Monthly, May, 1898. Vol. 8, pp. 586-588.

59. —— —— From Fundamental to accessory in the development of the nervous system and of movements. Ped. Sem., Oct., 1898. Vol. 6, pp. 5-64.

60. **Burke, Mrs. B. Ellen** Children's secrets. Trans. Ill. Soc. for Child Study, April, 1898. Vol. 3, pp. 56-61.

61. **Burkhard, P.** Die Fehler der Kinder. Nemnich, Karlsruhe, 1898. pp. 102.

62. **Burnham, Wm. H.** Bibliography of school hygiene. Proc. N. E. A. for 1898. pp. 505-523.
A select list of 436 titles with a few descriptive and critical notes.

63. **Burton, Richard** Literature for children. N. A. Review, Sept., 1898. Vol. 167, pp. 278-286.

64. **Calkins, Mary Whiton** Short studies in memory and association. Psychol. Rev., Sept., 1898. Vol. 5, pp. 451-462.
A study of the immediate and of the delayed recall of the concrete and of the verbal.

65. **Camerer, Wilhelm** Der Stoffwechsel des Kindes von der Geburt bis zur Beendigung des Wachstums meist nach eigenen Versuchen dargestellt. Zweite Ausgabe mit Ergänzungen. H. Laup'schen Buchhandlung, Tübingen, 1896. pp. 160.
An important study of assimilative and excretive processes.

66. **Canton, William** W. V. Her book and various verses. Stone & Kimball, N. Y., 1898. pp. 146.
Records of very 'cute doings and sayings of a child, with the author's poetic elaboration of some of them.

67. **Carlier, Jules** Les colonies scolaires et "l'œuvre du grand air" de Bruxelles. Rev. Pédagogique, Jan., 1898. Vol. 32, pp. 42-52.

68. **Carson, J. C.** The importance of a high grade of physical health in feeble-minded inmates of public institutions, with a view to their right development, and the best method of securing such health. Reprint from 31st Annual Report, N. Y. State Board of Charities, Jan. 24, 1898. pp. 10.

69. **Carter, Marion H.** Darwin's idea of mental developement. Am. Jour. of Psy., July, 1898. Vol. 9, pp. 534-559.

70. —— —— Educational paper dolls. Jour. of Pedagogy, April, 1898. Vol. 11, pp. 133-144.
An excellent exposition of the use to be made of paper dolls in the study of myths, history, and literature.

71. **Chamberlain, Alex. F.** The lesson of "the little child." North Western Monthly, Feb., 1898. Vol. 8, pp. 435-439.

72. **Chase, Susan F.** Choice of reading for the early adolescent years. Proc. N. E. A., 1898. pp. 1011-1015.

73. **Chrisman, Oscar** The secret language of children. North Western Monthly, Jan. and June, 1898. Vol. 8, pp. 375-379; 949-651.

74. —— —— Results of child study. Education, February, 1898. Vol. 18, pp. 322-332.
Based on replies to a questionnaire sent to teachers.

75. —— —— Religious ideas of a child. Child Study Mo., March, 1898. Vol. 3, pp. 516-528.

76. —— —— Paidology, the science of the child. Ed. Rev., March, 1898. Vol. 15, pp. 269-285.
A summary of the author's dissertation submitted to the University of Jena for the degree of Doctor of Philosophy.

77. —— —— The secret language of childhood. Century, May, 1898. Vol. 56, pp. 54-58.

78. —— —— Religious periods of child-growth. Ed. Rev., June, 1898. Vol. 15, pp. 40-48.

79. —— —— Child and parent. North Western Monthly, Nov., Dec., 1898. Vol. 9, pp. 135-138; 180-183.

80. **Clapp, Henry L.** School gardens. Pop. Sci. Mo., Feb., 1898. Vol. 52, pp. 445-456.

81. **Coe, George A.** The morbid conscience of adolescents. Trans. Ill. Soc. for Child Study, Oct., 1898. Vol. 3, pp. 97-108.

82. **Cohn, Hermann** Die Schulartz frage in Breslau. Zeit. für Schulgesundheitspflege, Nov. 1898. Vol. 11, pp. 579-596.

83. **Collins, Joseph** The genesis and dissolution of the faculty of speech: a clinical and psychological study of aphasia. Macmillan Co., N. Y., 1898. pp. 432.
The most valuable treatment of speech disturbances to be found in the English language.

84. **Collins, Patti Lyle** What children ask of Santa Claus. Ladies' Home Journal, Dec., 1898. Vol. 16, p. 31.

85. **Colozza, G. A.** Del potere dell'inibizione; nota di pedagogia. Paraira, Roma, 1898. pp. 128.
A good study of inhibition.

86. **Compayré, Gabriel** Saturday teachers' class at the Westfield normal school. Education, Feb., 1898. Vol. 18, pp. 261-264.
The translation of an article published in Manuel Général de l'Instruction Primaire (Paris), for Oct. 16, 1897.

87. **Core, E. B.** Getting good pictures of children. Ladies' Home Journal, Feb., 1898. Vol. 15, No. 3, p. 13.

88. **Curtis, Henry S.** Inhibition. Ped. Sem., Oct. 1898. Vol. 6, pp. 65-113.

89. **Curtis, H. S., and Partridge, G. E.** Child study in connection with the vacation schools. Report on the vacation schools and playgrounds, N. Y. City. Borough of Manhattan and the Bronx, 1898. pp. 51-97.

90. **Curtiss, Frank Homer,** Some investigations regarding loss in weight and gain in height during sleep. Am. Phys. Ed. Rev., December, 1898. Vol. 3, pp. 270-273.

91. **Darrah, Estelle M.** A study of children's ideals. Pop. Sci. Mo., May, 1898. Vol. 53, pp. 88-98.
An excellent statistical study of children's estimate of character.

92. **Dawson, Geo. E.** Child study. A series of articles in the International Evangel, Sept., 1897 to Sept., 1898.

93. **Defert, Louis** L'enfant et l'adolescent dans la société moderne. Préface de M. Th. Roussel. Montgrédien et Cie, Librairie Illustrée, Paris, 1898. pp. 221.
A popular work, devoted chiefly to infancy. Author maintains absolute neutrality, seeks only to present facts.

94. **Delabarre, E. B.** A method of recording eye movements. Am. Jour. of Psy., July, 1898. Vol. 9, pp. 572-574.

95. **Delpench, A.** La période prépubére. Presse Méd, Paris, 1898. Vol. 2, pp. 89-94.

96. **Delvaille, C.** L'hygiène scolaire au congrès international d'hygiène de Madrid. Rev. Pédagogique, Aug., 1898. Vol. 33, pp. 115-126.

97. **Demolins, Edmond** Anglo-Saxon superiority: to what it is due. R. F. Fenno & Co., N. Y., 1898. pp. 343.
In part I, asks whether the French, German and English school system forms men, and how to bring up our children.

98. **Deucker, R.** Das Kind und die geschlechdiche Entwickelung. Spohr, Leipzig, 1898. pp. 36.

99. **Dewey, John** Some remarks upon the psychology of number. Ped. Sem., Jan., 1898. Vol. 5, pp. 426-434.

100. **Dexter, Edwin G.** The child and the weather. Ped. Sem., April, 1898. Vol. 5, pp. 512-522.
See, also, North Western Monthly, Oct., 1898. Vol. 9, pp. 93-97.

101. **Dieckhoff, Chr.** Die Psychosen bei psychopathisch-minderwertigen. Allg. Zeits. f. Psychiat., 1898. Vol. 55, pp. 215-250.

102. **Dinsmore, J. W.** Running away. North Western Monthly, Dec., 1898. Vol. 9, pp. 183-186.

103. **Dodd, C.** A study in school children. National Rev., 1898. Vol. 32, pp. 66-74.

104. **Donath, Julius** Die Anfänge des menschlichen Geistes. Fest-Vortrag, gehalten in der Jahresversammlung der Gesellschaft der Budapester Hospitalsärzte, am 29. Dezember, 1897. Stuttgart, F. Enke, 1898. 47 s.

A very interesting discussion of the mind of the child in relation to the savage and the race.

105. **Du Bois, Patterson** The Sunday school as a force. North Western Monthly, Feb., 1898. Vol. 8, pp. 439-442.

106. **Elliott, Delia M.** Use of the voice in teaching. Am. Phys. Ed. Rev., Sept., 1898. Vol. 3, pp. 216-219.

107. **Ellis, A. Caswell** Play in education. North Western Monthly, Nov., 1898. Vol. 9, pp. 140-143.

108. **Ellis, Havelock** Auto-erotism: A psychological study. Alienist and Neurologist, April, 1898. Vol. 19, pp. 260-299.

A thorough general study of some sex-phenomena.

109. **Erdmann, Benno und Dodge, Raymond** Psychologischen Untersuchungen ûber das Lesen auf experimenteller Grundlage. Niemeyer, Halle A. S., 1898. pp. 360.

Considers rest and motion of the eye in reading. Gives descriptions of apparatus.

110. **Evellin, F.** Rapport sur l'enseignement de la morale dans les écoles primaires de l'academie de Paris. Rev. Pédagogique, Feb., 1898. Vol. 32, pp. 97-120.

111. **Fall, Delos** School diseases and medical inspection. Proc. N. E. A., 1898. pp. 534-544.

112. **Fauth, Franz** Das Gedächtnis, Samml. von Abh. a. d. geb. d. Paed. Psy. u. Physiol. Band 1, Heft 5. Reuter & Reichard, Berlin, 1898. pp. 88.

113. **Felker, Allie M.** Play as a means of idealizing and extending the child's experience. Proc. N. E. A., 1898. pp. 624-632.

114. **Féré, Ch.** La famille neuropathique. 2d ed. F. Alcan, Paris, 1898.

Valuable as a guide to the literature of the subject. Large list of authors cited.

115. **Ferrari, G. C.** Manifestazioni artistiche accessuate in una bambina. Archiv. di Psichiat., 1898. Vol. 19, pp. 238-256.

116. **Fitz, Geo. W.** The hygiene of instruction in primary schools. Proc. N. E. A., 1898. pp. 544-550. Also, in Am. Physical Ed. Rev., Dec., 1898. Vol. 3, pp. 242-248.

A strong plea for the correlation of mental and physical development.

117. **Fletcher, Horace** That lost waif or social quarantine, Chicago: Kindergarten Literature Co., 1898. pp. 270.

A study of neglected and abandoned children.

118. **Freud, S.** Die infantile Cerebrallähmung. Hölder, Vienna, 1897. pp. 327.

119. **Galbreath, Louis H.** The study of children by teachers. North Western Monthly, April, 1898. Vol. 8, pp. 541-544.

120. —— —— Child study for class work. Trans. Ill. Soc. for Child Study, April, 1898. Vol. 3, pp. 18-28.

121. —— —— Child study in the art of teaching. Journal of Pedagogy, July, 1898. Vol. 11, pp. 237-252.
Discusses some of the more direct pedagogic bearings of child study.

122. —— —— Practical course in child study for teachers. Trans. Ill. Soc. for Child Study, Oct., 1898. Vol. 3, pp. 153-170.

123. **Gallaudet, E. M.** The deaf and their possibilities. Proc. N. E. A., 1898. pp. 207-214.

124. **Gates, Fanny B.** Musical interests of children. Journal of Pedagogy, October, 1898. Vol. 11, pp. 265-284.
A statistical study of the song preferences of 2000 school children with the reasons for preferences; also, discusses briefly the music sense among primitive people.

125. **Gattel, F.** Ueber die sexuellen Ursachen der Neurastheni u. Angstneurose, Hirschwald, Berlin, 1898. pp. 68.

126. **Gélineau,** —— Hygiène de l'oreille et des sourds. Maloine, Paris, 1897. pp. 127.

127. **Gilles, L.** Du calcul de la mortalité des enfants placés en nourrice. Gy. Ronen, 1898. pp. 20.

**Gonzales-Alvarez, B.** See **Alvarez, B. Gonzales**

128. **Gordy, J. P.** What can child study contribute to the science of education? Proc. N. E. A., 1898. pp. 348-354.

129. **Götze, C.** Das Kind als Künstler, Hamburg. Lehrervereinigung für die Pflege der künstlichen Bildung, 1898. pp. 36 and 8 plates.
Summarizes the results of inductive studies on children's drawings.

130. **Gould, George M.** Child fetiches. Ped. Sem., Jan., 1898. Vol. 5, pp. 421-425.

131. **Griffith, E. W.** Interest from the child study point of view. Child Study Monthly, Nov. 1898. Vol. 4, pp. 285-287.

132. **Groos, Karl** The play of animals (Trans. by Elizabeth L. Baldwin). D. Appleton & Co., N. Y., 1898. pp. 341.
Although dealing primarily with the play instinct in animals there is much in the book bearing on the plays of children.

133. —— —— Uber die Necklust. Die Kinderfehler, March, 1898. Vol. 3, pp. 33-39.
An account of the teasing and bullying instincts of children.

134. **Groszmann, M. P. E.** Language teaching from a child study point of view. Child Study Monthly, Nov., 1898. Vol. 4, pp. 266-278.

135. **Gulick, Luther** The religion of boys. The Asssociation Outlook, Springfield, Mass. Vol. 8, pp. 33-48.

136. —— —— Sex and religion. Series of articles published during 1897-98, in Association Outlook, Springfield, Mass.

137. —— —— Some psychical aspects of muscular exercise. Pop. Sci. Mo., Oct., 1898. Vol. 53, pp. 793-805.
An admirable statement of the psychological basis of play.

138. **Gutzmann, H.** Das Stottern. Rosenheim, Frankfort a. M., 1898. pp. 467.

139. **Haddon, Alfred C.** The study of man. G. P. Putnam's Sons, N. Y., 1898. pp. 410.
Contains chapters on measurements and their importance in anthropometry, toys and games, and the singing, counting and funeral games.

140. **v. Hagen, Karl** Die Geschlechts-Bestimmung des werdenden Menschen und was wir über die geschlechtliche Vorausbestimmung wussten und wissen. H. Steinitz, Berlin, 1898. pp. 60.

141. **Hall, G. Stanley** Some aspects of the early sense of self. Am. Jour. of Psy., April, 1898. Vol. 9, pp. 321-395.

142. —— —— New phases of child study. Child Study Monthly, May, 1898. Vol. 4, pp. 35-40.
A brief statement of some characteristics of adolesence.

143. —— —— Initiations into adolescence. Proc. Am. Antiq. Soc., Worcester, Mass., Oct. 21, 1898. Vol. 12, pp. 367-400.

144. —— —— The love and study of nature: a part of education. Agriculture of Mass., 1898. pp. 134-154.
Lectures delivered before the Mass. State Board of Agriculture at Amherst, Dec. 6, 1898. Treats of child's attitude toward nature.

145. —— —— Topical Syllabi, 1898-99. I. The organizations of American Student Life with Henry D. Sheldon; II. Mathematics in Common Schools, with E. B. Bryan; III. Mathematics in the Early Years, with E. B. Bryan; IV. Unselfishness in children, with Willard S. Small; V. The Fooling Impulse in Man and Animals, with Norman Triplett; VI. Confession, with Erwin W. Runkle; VII. Pity; VIII. Perception of Rhythm by Children, with Chas. H. Sears.

146. **Hall, Jeanette W.** The period of adolescence. Child Study Monthly, June, 1898. Vol. 4, pp. 68-82.
Contains a bibliography of 21 titles but most of the references are incomplete.

147. **Halleck, Reuben Post** Some contributions of child study to the science of education. Proc. N. E. A., 1898. pp. 254-262.

148. —— —— The education of the motor centers. Trans. Ill. Soc. for Child Study, April, 1898. Vol. 3, pp. 46-55.

149. **Hancock, John A.** Children's tendencies in the use of written language forms. North Western Monthly, June, 1898. Vol. 8, pp. 646-649.

150. **Haney, James P.** The hundredth child. Reprint from the Teachers' Quarterly, N. Y. City, 1898. pp. 13.

151. **Harris, William T.** (and others) The psychology of the initiative functions in childhood as related to the process of learning. Rep. Comm. of Ed. for 1896-97. Vol. 1, pp. 676-681.

152. —— —— Effect of exercise on the vital organs. Proc. N. E. A., 1898. pp. 930-933.

153. **Hartwell, Edward M.** School hygiene—what it is and why we need it. Proc. N. E. A., 1898. pp. 498-505.

**Haskell, Ellen M.** See Bolton and Haskell (No. 41).

154. **Henie, C.** Untersuchungen über die Zähne der Völksschuler zu Hamar in Norwegen. Zeit. für Schulgesundheitspflege, Feb. 1898. Vol. 11, pp. 65-71.

A careful investigation of the condition of the teeth of the school children in a Norwegian town of 5000 inhabitants.

155. **Henri, Victor and Catherine** Earliest recollections. Pop. Sci. Mo., May, 1898. Vol. 53, pp. 108-115.

Reminiscent study of childhood.

156. **Hogan, Louise A.** A study of a child. Harper & Bro., N. Y., 1898. pp. 220.

A rather diffuse history of a child during the first seven years of its life. Illustrated.

157. **Holmes, Manfred J.** Apperception and child study. Trans. Ill. Soc. for Child Study, Oct., 1898. Vol. 3, pp. 145-152.

158. **Hrdlicka, Ales** Report on anthropological work in the state institution for feeble-minded children, Syracuse, N. Y. Supplemental to 48th Annual Report, 1898. pp. 98.

159. —— —— Anthropological investigations on 1000 white and colored children of both sexes. 47th Annual Report, N. Y. Juvenile Asylum. State Printers, N. Y. and Albany, 1899. pp. 86.

An excellent piece of work. Commendable for its conservative tone.

160. —— —— The medico-legal aspect of the case of Maria Barbella. State Hospitals' Bulletin, Utica, N. Y., April, 1897. pp. 1-87, with 2 charts and 19 figures.

161. **Huey, Edmund B.** Preliminary experiments in the physiology and psychology of reading. Am. Jour. of Psy., July, 1898. Vol. 9, pp. 575-586.

162. **Hugh, D. D.** Formal education from the standpoint of physiological psychology. Ped Sem., April, 1898. Vol 5, pp. 599-605.

163. **Itard,** —— Rapports et mémoires sur le sauvage de l' Aveyron, l'idiotie et la surdi—mutité. Avec une appréciation de ces rapports par Delasiauve. Préface par Bourneville. Eloge d'Itard par Bousquet. Félix Alcan, Paris, 1894. pp. 144.

A reprint, with notes and introduction, of a classic.

164. **Ireland, William W.** The mental affections of children, idiocy, imbecility, and insanity. J. & A. Churchill, London. 1898. pp. 442.

An authoritative work on the care and training of mentally deficient children.

165. **Jacobi, Mary Putnam** Care of the adolescent girl. The Mother's Voice, Jan., 1898. Vol. 2, pp. 2-3; 13-15.

166. **Jegi, John I.** Children's ambitions. Trans. Ill. Soc. for Child Study, Oct., 1898. Vol. 3, pp. 131-144.

Treats of German children in Milwaukee. Conservative in general tone, and valuable.

167. **Johnson, George E.** Play in physical education. Proc. N. E. A., 1898. pp. 948-958.

168. **Juvenile Offenders.** A report based on an inquiry instituted by the committee of the Howard Association. Wertheimer, Lea & Co., London, 1898. pp. 39.

The opinions are almost universally opposed to imprisonment and in favor of whipping.

169. **Kemsies, Ferdinand** Arbeitshygiene der Schule auf Grund von Ermüdungsmessungen. Samml. v. Abh. a. d. Geb. d. Päd. Psy. u. Physiol. Band 2, Heft I, 1898. pp. 64.

A study of the effect of fatigue on the quality and quantity of mathematical work made by means of the ergograph.

170. **Keyes, Chas. H.** What can child study do for our schools? North Western Monthly, June, 1898. Vol. 8, pp. 641-644.

Abstract of an address before meeting of the Conn. Teachers' Ass'n, Willimantic, Conn., May 6, 1898.

171. **Kiernan, James G.** The periods of stress in childhood. Trans. Ill. Soc. for Child Study, Oct., 1898. Vol. 3, pp. 91-96.

172. **Kirkpatrick, E. A.** The problem of children's reading. North Western Monthly, June, 1898. Vol. 8, pp. 651-654.

173. —— —— Children's reading I. North Western Monthly, Dec., 1898. Vol. 9, pp. 188-191.

174. —— —— Defects in the eyes of children. State Normal School, Fitchburg, Mass., 1898. pp. 7.

A little pamphlet sent out to parents of children whose eyes are found defective.

175. **Kittredge, F. E.** Adenoids and their complications in children. N. Y. Med. Jour., Nov. 12, 1898. Vol. 68, pp. 702-706.

176. **Kline, Linus W.** Truancy as related to the migrating instinct. Ped. Sem., Jan., 1898. Vol. 5, pp. 381-420.

177. —— —— The migratory impulse vs. love of home. Am. Jour. of Psy., Oct., 1898. Vol. 10, pp. 1-81.

178. **Knapp, Ludwig** Der Scheintod der Neugeborenen. Braumüller, Wien u. Leipzig, 1898. pp. 163.

Largely on the development of the various methods of reanimating apparently dead new born children. Bibliography of 13 pp.

179. **Kohlbrugge, I. H. F.** Der Atavismus. Scrineriüs, Utrecht, 1897. pp. 31.

180. **Krauss, W. C.** The stigmata of degeneration. Am. Jour. of Insanity, July, 1898. Vol. 55, pp. 55-88.

181. **Kraus-Boelté, Maria** The development of the inner life of the child. Proc. N. E. A., 1898. pp. 608-614.

182. **Krohn, William O.** Minor mental abnormalities in children as occasioned by certain erroneous school methods. Child Study Monthly, Oct., 1898. Vol. 4, pp. 201-214.

183. **Kuhn, Maurice** Les enfants degénérés dans les écoles publiques. Rev. Pédagogique, Jan., 1898. Vol. 32, pp. 53-58.
Translation and discussion of a paper on feeble-minded children in the public schools, by Will S. Monroe.

184. **Laing, Mary E.** An inductive study of interest. Ed. Review, Nov., 1898. Vol. 16, pp. 381-390.

185. **Lancaster, E. G.** The vanishing character of adolescent experiences. North Western Monthly, June, 1898. Vol. 8, pp. 644-646.

186. **Lang, Ossian H.** Some cautions to be observed in child study. Proc. N. E. A., 1898. pp. 898-902.

187. **Law, Frederick H.** Age at which children leave school. Ed. Rev., Jan., 1898. Vol. 15, pp. 40-49.
Discusses the extent of school training of children in N. Y. City.

188. **Lay, W. A.** Führer durch den Rechtschreibunterricht. Nemnich, Karlsruhe, 1897. pp. 230.
Contains an account of important investigations in regard to spelling.

189. **Lay, Wilfred** Mental imagery. Experimentally and subjectively considered. The Psychol. Review Monograph Supp. Vol. 2, No. 3, May, 1898. pp. 59.

190. **Leclère, A.** Description d'un objet. L'Année Psychol., 1897. Vol. 4, pp. 379-389.

191. **Lemox, D., and Sturrock, A.** The elements of physical education. A teacher's manual. Wm. Blackwood & Sons, London, 1898. pp. 241.
A practical and interesting book.

192. **Letchworth, Wm. Pryor** Dependent children and family homes. The Sanitarian, N. Y., Jan., 1898. Vol. 40, pp. 3-14.

193. **Lietz, Hermann** Emlohstobba. Berlin, 1897. pp. 192.

194. **Loeper, F.** Ueber Organisation von Hilfsschulen. Die Kinderfehler, Nov., 1898. Vol. 3, pp. 167-177.
A discussion of the question of separate classes for the mentally dull.

195. **Lombroso, Paolo** (The logical consistency of the ideas of children) Voprosi Philos. Moscow, Jan., Feb.; Mch., Apr., 1898. Year 9, pp. 23-40; 99-110.

**Luckey, G. W. A.** (See Child Study Department, North Western Monthly, 1898. Lincoln, Neb.)

196. **Lui, Aurelio** L'isterismo infantile. Riv. Sper. di Freniat, 1898. Vol. 24, pp. 745-771.
Résumé of recent studies on hysteria in children.

197. **Lukens, Herman T.** The school fatigue question in Germany. Ed. Review, March, 1898. Vol. 15, pp. 246-254.
An excellent statement of recent investigations in Germany and especially of the labors of Kraepelin and Griesbach.

198. —— —— The method of suggestion in the cure of faults. North Western Monthly, May, 1898. pp. 592-595.

199. —— —— Notes abroad. Ped. Sem., Oct., 1898. Vol. 6, pp. 114-125.

200. **Mackenzie, John Noland** The physiological and pathological relations between the nose and the sexual apparatus of man. Bull. of the Johns Hopkins Hospital, Jan., 1898. Vol. 9, pp. 10-17.

201. **McKenzie, R. Tait** Influence of school life on curvature of the spine. Proc. N. E. A., 1898. pp. 939-948.

202. **McLeish, Mrs. Andrew** Observations in the development of a child in the first year. Trans. Ill. Soc. for Child Study, Oct., 1898. Vol. 3, pp. 109-124.
A rather careful bit of individual child study made by an observing mother.

203. **MacLennan, S. F.** Method in child study, with special reference to the psychological point of view. Trans. Ill. Soc. for Child Study, April, 1898. Vol. 3, pp. 29-45.

204. **McMurry, Lida Brown** Relation between parents and teachers. School and Home Education, Sept., 1898. Vol. 18, pp. 17-18.

205. **Mall, Franklin P.** Development of the human intestine and its position in the adult. Bull. of the Johns Hopkins Hospital, Sept., Oct., 1898. Vol. 9, pp. 197-208.
First attempt to trace the position and growth of the intestine from the embryo to the adult.

206. **Mansfield, Edith** Conflict of authority. Child Study Monthly, March, 1898. Vol. 3, pp. 529-539.
A good statistical study of school discipline from the child's standpoint.

207. **Marina, Giuseppe** Ricerche antropologiche ed etnografiche sui ragazzi. Bocca, Torino, 1896. pp. 86.
Anthropometric studies of Italian boys. Has a good bibliography.

208. —— —— Studi antropologici sugli adulti. Bocca, Torino, 1897. pp. 38.
Companion Vol. to preceding.

209. **Marshall, Henry R.** Instinct and reason. The Macmillan Co., N. Y., 1898. pp. 574.

210. **Mead, George H.** The child and his environment. Trans. Ill. Soc. for Child Study, April, 1898. Vol. 3, pp. 1-11.

211. **Merrill, Jennie B.** Children's gardens. North Western Monthly, Oct., 1898. Vol. 9, pp. 89-90. Also, Proc. N. E. A., 1898. pp. 598-602.

212. **Milliken, O. J.** Chicago vacation schools. Am. Jour. of Sociology, Nov., 1898. Vol. 4, pp. 289-308.

213. **Mills, Wesley** The nature and development of animal intelligence. The Macmillan Co., N. Y., 1898. pp. 307.
A valuable addition to the literature of the subject. Well indexed.

214. **Moll, A.** Das nervöse Weib. F. Fontane et Cie., Berlin. pp. 226.

215. **Möller, P.** Ueber Intelligenzprüfungen. Ein Beitrag zur Diagnostik des Schwachsinns. Berlin, 1897. pp. 32.

216. **Monroe, Will S.** Vocational interests of children. Education, Jan., 1898. Vol. 18, pp. 259-264.
A statistical study of the ambitions of 1,755 elementary school children.

217. —— —— Über die Behandlung der Verbrecher. Die Kinderfehler, Jan., 1898. Vol. 3, pp. 19-22.
Describes the training of adolescent delinquents in America.

218. —— —— Chorea among public school children. American Physical Education Review, March, 1898. Vol. 3, pp. 19-24.
Translated into German by Johann Trüper and published in Die Kinderfehler, Sept., 1898. Vol. 3, pp. 155-160.

219. —— —— Das Studium der Kindesseele in Amerika. Deutsche Zeit. für Ausländisches Unterrichtswesen, April, 1898. Vol. 3, pp. 193-203.
Historical and descriptive account of the child study movement in America.

220. —— —— Development of the social consciousness of children. North Western Monthly, Sept., 1898. Vol. 9, pp. 31-36. Also Proc. N. E. A., 1898. pp. 921-928.
Traces briefly the genesis of the social sense in animals, primitive man, and the child.

221. —— —— Child study outlines. Second series: 1. Children's spontaneous drawings. 2. The money sense of children. 3. Memory types of children. 4. Perception of children. 5. Fatigue in school children. 6. Growth of children. 7. Psychology of adolescence. 8. Imitation in childhood. 9. Suggestibility of children. Wright & Potter Printing Co., Boston, 1898.
A series of nine outlines suggesting specific studies, hints for the collation of the material collected, and bibliographic references to the literature of the subject.

—— —— See, also, No. 183.

222. **Morton, Aima B.** Child study and education. Public School Journal, Feb., 1898. Vol. 17, pp. 289-293.

223. **Mott, T. A.** Contagious diseases in school. Proc. N. E. A., 1898. pp. 381-386.

**Muffang, H.** See **Ammon O.**

224. **Munro, Mary F.** Three years in the life of a child. Ed. Review, Nov., 1898. Vol. 16, pp. 367-377.

225. **Mutke, Robert** Die Behandlung stammelnder und stotternder Schüler. Breslau, 1898. pp. 30.

Relates largely to the pedagogic and didactic treatment of stammerers who relapse. Author is director of the curative course of the Breslau Institution for stammering children.

226. **Neuman, B. P.** Take care of the boys. Fortnightly Rev., Sept., 1898. Vol. 70, pp. 410-421. Also Living Age, Nov. 19, 1898. Vol. 219, pp. 503-513.

227. **Noikov, D.** Das Aktivitätsprincip in der Pädagogik J. J. Rousseau's. Schmidt, Leipzig, 1898. pp. 160.

228. **Noss, Theo. B.** Child study record. The Author, Southwestern State Normal School, California, Pa.

A convenient individual record book prepared for the author's classes in pedagogy.

229. **Oltuszevski, W.** Die geistige und sprachliche Entwickelung des Kindes. H. Cornfeld, Berlin, 1897. pp. 43.

Gives monthly details of linguistic development of a Polish child, Valuable for comparison with Preyer, whose work the author has carefully collated with his own.

230. **Oppenheim, Nathan** The development of the child. Macmillan Co., N. Y., 1898. pp. 296.

Contents: Facts in the comparative development of the child; importance of heredity and environment; the primary school; religion; the child as a witness in suits of law; the child-criminal; the genius and the defective; the child and institutional life; the profession of maternity.

231. **Osborn, F. W.** Wordsworth's poems of children and childhood. Education, Oct., 1898. Vol. 18, pp. 93-99.

A brief study of the child in literature.

232. **O'Shea, M. V.** "Spare the rod and spoil the child." The Outlook, Jan. 8, 1898. Vol. 58, pp. 128-130.

Results of child study applied to corporal punishment.

233. —— —— The purpose, scope and method of child study. Jour. of Pedagogy, Jan., 1898. Vol. 11, pp. 9-23.

A forceful statement of the practical utility of child study.

234. —— —— Some adolescent reminiscences. Jour. of Pedagogy, Oct., 1898. Vol. 11, pp. 299-317.

A study based on replies to a questionnaire from forty college students on their recollections as to growth, intellectual and emotional phenomena, dress, etc., during early adolesence.

235. **Oswald, Felix L.** The secret of atavism. Pop. Sci. Mo., June, 1898. Vol. 53, pp. 192-196.

236. **Partridge, George E.** Reverie. Ped. Sem., April, 1898. Vol. 5, pp. 445-474.

—— —— See, also, No. 89.

237. **Pearson, Karl** On a scale of intelligence in children. Jour. of Ed., London, Sep., 1898. N. S. Vol. 20, pp. 509-510.

238. **Peck, E. A.** Defective vision. Child Study Monthly, June, 1898. Vol. 4, pp. 100-104.

239. **Pelopi,** —— De la precocité et des perversions de l'instinct sexuel chez les enfants. Bordeau, 1898.

240. **Petit, Edouard** Autour de l'école du soir : I. Chez les adolescents ; II. Chez les ouvriers ; III. Chez les soldats. Revue Pédagogique, April, 1898. Vol. 32, pp. 303-322.

241. —— —— Ames d'écoliers. Rev. Pédagogique, Nov., 1898. Vol. 33, pp. 377-387.

242. **Phelps, G. M.** Care of children's teeth. Child Study Monthly, Oct., 1898. Vol. 4, pp. 225-233.

243. **Pierce, A. H.** The illusion of the Kindergarten pattern. Psychological Review, May, 1898. Vol. 5, pp. 233-253.

244. **Pierce, John M.** Psychological aspects of physical education. Am. Phys. Ed. Review, March, 1898. Vol. 3, pp. 30-37.

245. **Phillips, Daniel E.** Some remarks on number and its application. Ped. Sem., April, 1898. Vol. 5, pp. 590-598.

246. **Plummer, Edward M.** The Olympic games in ancient times. Am. Phys. Ed. Review, March and June, 1898. Vol. 3, pp. 1-18; 93-106.

247. —— —— Toys and games for children among the ancient Hellenes. Am. Phys. Ed. Review, Sept., 1898. Vol. 3, pp. 157-169.

248. **Pollock, Susan P.** Ideal play in the Kindergarten. Proc. N. E. A., 1898. pp. 604-608.

249. **Porter, Isaac, Jr.** Photographing children at home. Ladies' Home Journal, Dec., 1898. Vol. 16, No. 1, p. 35.

250. **Powell, W. B.** Medical inspection of schools. Proc. N. E. A., 1898. pp. 454-462.

251. **Quantz, J. O.** Dendro-psychoses. Am. Jour. of Psy., July, 1898. Vol. 9, pp. 449-506.

252. **Quincy, Josiah** Playgrounds, baths, and gymnasia. Am. Phys. Ed. Review, Dec., 1898. Vol. 3, pp. 234-241.

253. **Ragozin, Zenaide A.** Tales of the heroic age ; Siegfried & Boewulf. G. P. Putnam's Sons, N. Y., 1898. pp. 332.
Addressed to childhood under the conviction that myth is essential. Timely and valuable for every teacher of literature.

254. **Regnault, F. et Raoul** Comment on marche. Lavanzelle, Paris, 1898. pp. 188.

255. **Report** of the Chicago Vacation School Committee of Women's Clubs, Chicago, 1898. pp. 44.

256. **Report** of the Departmental Committee on Defective and Epileptic Children. Vol. 1. The Report, pp. 42; Vol. 2. Minutes of Evidence, Appendices, etc., pp. 283. Eyre & Spottiswood, London, 1898.

Recommends that teachers be trained to make special observations upon these children.

257. **Robinson, Harriet H.** Loom and spindle, or life among the early mill girls. T. Y. Crowell & Co., N. Y., 1898. pp. 216.

Valuable for its details and economic history.

258. **Rohleder, H.** Die Masturbation. Fischer's Med., Buchhandlg, Berlin, 1898. pp. 319.

A monograph for physicians and teachers. Elaborate and systematic.

259. **Rosenfeld, Leonhard** Arbeitsschulen für Verkrüppelte. Zeit. für Schulgesundheitspflege, Jan., 1898. Vol. 11, pp. 4-18.

An account of the European movement to give special training to crippled and deformed children.

260. **Roubinovitch, Dr.** L'alcool, l'enfance et l'école. Rev. Pédagogique, Jan., 1898. Vol. 32, pp. 35-41.

261. **Rowe, S. H.** Fear in the discipline of the child. The Outlook, Sept. 24, 1898. Vol. 60, pp. 232-234.

262. **Royce, Josiah** The new psychology and the consulting psychologist. Proc. N. E. A., 1898. pp. 554-570.

263. —— —— The psychology of invention. Psychological Review, March, 1898. Vol. 5, pp. 113-144.

264. **Rude, A.** Jugendlektüre und Schülerbibliotheken. Rein's Ency. Handb. d. Pädagogik. Vol. 3, pp. 934-945.

265. **Sachse, L.** Das Kind und die Zahl. Eine psychologisch-pädagogische Skizze. Zeits. f. Philosophie u. Pädagogik. Langensalza, 1898. Band 5, pp. 356-360.

266. **Salge, B.** Hysterie bei Kindern. Berlin, 1898.

267. **Sanborn, Alvan F.** About boys and boys' clubs. N. A. Review, Aug., 1898. Vol. 167, pp. 254-256.

268. **Sanders, W. H.** Attitude of Rensselaer pupils toward school. North Western Monthly, Jan., 1898. Vol. 8, pp. 382-385.

269. **Schiller, Hermann** Der Stundenplan. Ein Kapitel aus der pädagogischen psychologie und physiologie. Samml. von Abh. Geb. a. d. Päd. Psy. u. Physiol. Reuther & Reichard, 1897. pp. 65.

270. —— —— Studien und Versuche ueber die Erlernung der Orthographie. Samml. v. Abh. a. d. Geb. d. Päd. Psy. u. Physiol. Band 2, Heft 4, 1898. pp. 63.

An excellent experimental study on spelling made in the elementary classes of the Gymnasium at Giessen.

271. **Schinz, Albert** La moralité de l'enfant. Rev. Philos., March, 1898. Vol. 45, pp. 259-295. Also, translation, by Ch. Ufer, Die Sittlichkeit des Kindes. Beyer u. Söhne, Langensalza, 1898. pp. 42.

272. **Schwalbe, B.** Schulhygienische Fragen und Mittheilungen, H. Heyfelder, Berlin, 1898. pp. 37.
Presents many measurements of height, weight, etc.

273. **Scott, Colin A.** Children's fears as material for expression and a basis of education in art. Trans. Ill. Soc. for Child Study, April, 1898. Vol. 3, pp. 12-17.

274. **Seeley, Levi** The daily programme in schools. Child Study Monthly, March, 1898. Vol. 3, pp. 544-549.
Summarizes briefly Friedrich's study on fatigue and Schuyten's study on voluntary attention.

275. **Seerley, Homer H.** The dangers of the adolescent period. Educational Foundations. E. L. Kellogg & Co., N. Y., 1898.

276. **Sheffield, Herman B.** A contribution to the study of hysteria in childhood as it occurs in the United States of America. N. Y. Med. Jour., Sept. 17-24, 1898. Vol. 68, pp. 412-416; 433-436.

277. **Sheldon, Henry D.** The institutional activities of American children. Am. Jour. of Psy., July, 1898. Vol. 9, pp. 425-448.

278. **Shinn, Millicent W.** Comparative importance of the senses in infancy. North Western Monthly, April, 1898. Vol. 8, pp. 544-547.

279. **Small, M. H.** Methods of manifesting the instinct for certainty. Ped. Sem., Jan., 1898. Vol. 5, pp. 313-380.

280. —— —— An experiment borrowed from the schoolroom. North Western Monthly, Nov., 1898. Vol. 9, pp. 134-135.

281. **Smith, A. T.** Psychological tendencies. The study of imitation. Rep. U. S. Comm. of Ed., 1896-97. Vol. 1, pp. 671-676.

282. **Smith, Nora A.** The children of the future. Houghton, Mifflin & Co., Boston, 1898. pp. 165.
Contains chapters on the study of children; training for parenthood; sand and the children; kindergarten training.

283. —— —— The kindergarten made possible in every home, village, or small neighborhood. Ladies' Home Journal, Nov., 1898. Vol, 15, No. 12, p. 20; Dec., 1898, Vol. 16, No. 1, p. 34; Jan., 1899, No. 2, p. 16; Feb., 1899, No. p. 22.

284. **Soldevilla, Carrera, M.** La infancia y la criminalidad. Lérida, 1897. pp. 240.

285. **Solotaroff, H.** The origin of the family. Am. Anthropologist, Aug., 1898. Vol. 11, pp. 229-242.

286. **Stableton, J. K.** The study of boys entering the adolescent period. III-IV. The relation of the sexes. V. An untruthful character. VI. The passionate boy. VII. Arrested development. North Western Monthly, Jan., March, April, May, Dec., 1898. Vol. 8, pp. 385-386; 484-487; 539-541; 589-592. Vol. 9, pp. 138-140; 179-180.

287. **Stanley, Hiram M.** On the early sense of self. Science, 1898. N. S. Vol. 8, pp. 22-23. (See No. 141.)

288. **Stern, Herman I.** The gods of our fathers. Harper & Brothers, N. Y., 1898. pp. 269.
A work on Saxon mythology that every student and teacher should read.

289. **Stryker, Mabel F.** Children's joys and sorrows. Child Study Monthly, Oct., 1898. Vol. 4, pp. 217-225.
A statistical study of the happiest and saddest days ever experienced by 1,800 school children.

290. **Stuart, Ruth McEnery** Sonny. A Christmas guest. The Century Co., N. Y., 1898. pp. 135.
Should be read by every teacher who has a tendency to magnify his office.

291. **Sudduth, W. X.** Nervous and backward children. Child Study Monthly, March, 1898. Vol. 3, pp. 540-543.
This series of articles continued in the issues for April, May, June and Sept., 1898.

292. **Sutherland, Alexander** The origin and growth of the moral instinct. Longmans, Green & Co., London, 1898. 2 Vols., pp. 461; 336.

293. **Swift, Edgar James** Heredity and environment. A study in adolescence. North Western Monthly, Sept., 1898. Vol. 9, pp. 36-41. Am. Phys. Ed. Rev., Sept., 1898. Vol. 3, pp. 170-178. Proc. N. E. A., 1898. pp. 910-916.
A study of juvenile delinquency.

294. **Szentesy, Béla** Die geistige Ueberanstrengung des Kindes. I. Theil: Von der Wiege bis zur Mittelschule. II. Theil: Die Psycho.-Physiologie des Musicirens. Pester Buchdruckerei Aktien-Gesellschaft, Budapest, 1898. pp. 123.
Part 1. A general characterization of childhood. Part 2. Describes the author's theory of playing the piano.

295. **Talbot, Eugene S.** Degeneracy. Its causes, signs and results. Contemp. Sci. Ser. Charles Scribner's Sons, N. Y., 1898. pp. 372.

296. —— —— A study of the stigmata of degeneracy among the American criminal youth. Jour. Am. Med. Ass'n, 1898. Vol. 30, pp. 849-856.

297. —— —— Defects of development in childhood. Trans. Ill. Soc. for Child Study, Oct. 1898. Vol. 3. pp. 75-90.

298. **Taylor, A. R.** The study of the child. D. Appleton & Co., N. Y., 1898. pp. 215.
A brief treatise on the psychology of the child with suggestions for teachers, students, and parents.

299. **Taylor, J. L.** The amount of work the growing brain should undertake. Bull. Am. Acad. Med., 1898. Vol. 3, pp. 469-482.

300. **Taylor, John Madison** The nervous mother. Reprint from University Med. Magazine (Phila.), July, 1895. pp. 8.

301. —— —— Puberty in girls and certain of its disturbances. A practical lesson. Reprint from Pediatrics, July 15, 1896. pp. 6.

302. —— —— Children of feeble resistance: their care and management. Reprint from Int. Med. Mag., Aug., 1896. pp. 26.

303. **Taylor, Joseph S.** Some practical aspects of interest. Ped. Sem., April, 1898. Vol. 5, pp. 497-511.

304. **Thompson, John G.** Child study in the training of teachers. North Western Monthly, Sept., 1898. Vol. 9, pp. 41-43. Also Proc. N. E. A., 1898. pp. 916-921.

305. **Titchener, E. B.** A primer of psychology. The Macmillan Co., N. Y., 1898. pp. 314.

306. —— —— Ebbinghaus's method for the study of fatigue in school hours. Journal of Education, June 30, 1898. Vol. 48, pp. 7-8.

307. **Trüper, Johann** Minor mental abnormalities in childhood. Child Study Monthly, May, June, Sept., and Dec., 1898. Vol. 4, pp. 2-15; 88-97; 130-138; 342-346.
This is a translation by C. C. Van Liew from the German of Trüper's excellent monograph on Psychopathische Minderwertigkeiten im Kindesalter.

308. —— —— Psychopathisches im Kindesleben. Rein's Ency. Handb. d. Pädagogik. Vol. 5, pp. 588-597.

309. **Truslow, Walter** Exercise during adolescence. Am. Phys. Ed. Review, June, 1898. Vol. 3, pp. 111-121.

310. **Tucker, Emmeline F.** Nebraska society for child study. North Western Monthly, Jan., 1898. Vol. 8, pp. 387-389.

311. —— —— The child and his school reader. North Western Monthly, June, 1898. Vol. 8, pp. 654-655.

312. **Tümpel, R.** Ueber die Versuche geistige Ermüdung durch mechanische Messungen zu untersuchen. Zeits. f. Philos. u. Pädagogik, 1898. Vol. 5, pp. 31-38; 108-114; 195-198.

313. **Ufer, Chr.** Zur Beobachtung der Kinder. Die Kinderfehler, Jan., 1898. Vol. 3, pp. 1-8.
Presents the claims of child study to parents.

314. —— —— Über Kinderpsychologie. Die Kinderfehler, May, 1898. Vol. 3, pp. 65-74.

**Vaschide, N.** See **Binet and Vaschide.** (No. 36.)

315. **Vitali, V.** Studi anthropologici in servizio della pedagogia. Vol. 1, I Romagnoli. Forli, 1896. pp. 116. Vol. 2, Le Romagnole. Turin, 1898. pp. 130.
Anthropometric and psychological studies of Italian boys and girls.

316. **Vivier, H.** Sur l'infantilisme. Jouve, Paris, 1898. pp. 58.

317. **Wagner, Ludwig** Unterricht und Ermüdung. Ermüdungsmessungen au Schülern des neuen Gymnasiums in Darmstadt. Samml. von Abh. a. d. Geb. d. Paed. Psy. u. Physiol. Vol. 1, Heft 4. Reuter u. Reichard, Berlin, 1898. pp. 134.
A study of fatigue in the gymnasium at Darmstadt by means of the compass æsthesiometer.

318. **Weir, James** The dawn of reason, or mental traits in the lower animals. Macmillan Co., N. Y., 1898. pp. 234.
Takes too high a view of animal mentality.

319. **Wessely, Rudolf** Der Geschmack der Quintaner und Quartaner. Zeits f. d. deuts. Unterricht, 1898. Vol. 12, pp. 449-460.

320. **Westermarck, Edward** The essence of revenge. Mind, July, 1898. N. S. Vol. 7, pp. 289-310.

321. **What** can child study contribute to the science of education? North Western Monthly, April, 1898. Vol. 8, pp. 535-539.

322. **Wilke, G.** Die Hauptberührungs Unterscheidungspunkte der Erziehungsgedanken John Locke's und J. J. Rousseau's. Erlangen, 1898. pp. 65.

323. **Wille, W.** Die Psychosen des Pubertätsalters. F. Deuticke, Wien, 1898. pp. 218.

324. **Wilson, Louis N.** Bibliography of child study. Pedagogical Seminary, April, 1898. Vol. 5, pp. 541-589. The same reprinted in pamphlet form, Clark University Press, Worcester, 1898. pp. 49
A list of 535 books and pamphlets on child study; 13 journals; 16 reports, serial studies, and translations of societies; and 81 works of standard reference on allied topics. With a subject index.

325. **Winship, Albert E.** Fitting the curriculum to the different ages of childhood and youth. Journal of Education, Nov. 17, 1898. Vol. 48, pp. 320-321.
A discussion of Pres. G. Stanley Hall's address before the New England Association of School Superintendents.

326. **Wissler, Clark** The interests of children in the reading work of the elementary schools. Ped. Sem., April, 1898. Vol. 5, pp. 523-540.

327. —— —— Pupils' interest as influenced by the teacher. Child Study Monthly, Sept., 1898. Vol. 4, pp. 139-146.
A statistical study of the preferences of pupils and teachers for certain school subjects.

328. **Wolfe, H. K.** Moral training of children. North Western Monthly, Feb., 1898. Vol. 8, pp. 431-435.

329. **Woods, Alice** Child study. Jour. of Ed., London, July, 1898. N. S. Vol. 20, pp. 396-397.

330. **Yoder, A. H.** Pubescence. North Western Monthly, May, 1898. Vol. 8, pp. 597-600.

331. **Ziehen, Th.** Die Ideenassoziation des Kindes. Erste Abhandlung. Abh. a. d. Geb. d. Paed. Psy. u. Physiol. Band 1, Heft 6. Reuter & Reichard, Berlin, 1898. pp. 66.
A study of the association of ideas of boys from 8 to 14 years.

332. —— —— Nervensystem. Rein's Ency. Handb. d. Pädagogik. Vol. 5, pp. 89-92.

333. **Zueblin, Charles** Municipal playgrounds in Chicago. Am. Jour. of Sociology, Sept., 1898. Vol. 4, pp. 145-158.

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# BOOK REVIEWS.

*Revue Internationale de Pédagogie Comparative.* Nantes (France): Auguste Mailloux, Rédacteur en chief. Mars, 1899, 1e année, No. 1. pp. 68. 10 francs a year.

This new review is published in the interests of defective children—the feeble-minded, deaf, blind, etc. It is pedagogic in character and aims to correlate the interest in abnormal children with the child study movement. Dr. Bourneville, the well-known alienist of the Bicetre, and Dr. Couêtoux, of Nantes, are associate editors of the new review. About sixty collaborateurs are announced for the current year, including Gabriel Compayré, Hamon du Fougeray, Edouard Petit, Edouard Drouot, and Maurice Kuhn, of France, Dr. A. E. Osborne, Dr. George W. Fitz, Dr. A. C. Rogers, Miss Harriet A. Marsh, Dr. Walter E. Fernald, Dr. Martin W. Barr, and Mr. Will S. Monroe, of the United States, with others interested in defectives in England, Germany, Belgium, Spain, Italy, and Denmark.

The first article in the opening number of this new review is a study of the feeble minded children in the public schools of California, by the writer. The investigation included the study of nearly 11,000 public school children, and the writer concludes that in every school of fifty pupils there is at least one child that can be more economically trained in special institutions for defectives than in the public schools. Kept in graded schools, under teachers who have little knowledge of their condition, these children leave the public schools and take prominent rank among the paupers, social failures, and criminals. In the second article, Dr. Hamon du Fougeray reviews the legislative enactments that have had special reference to the improvement of abnormal children in France. It is a succinct, historical and descriptive article. The third article is by Émile Grégoire, principal of the school for the deaf in Belgium. It is a historical survey of the teaching of the deaf and the blind in Belgium. Miss Harriet A. Marsh, of Detroit, tells in an attractive manner what is being done by the mothers of Michigan to further the child study movement. Several short articles and a number of book reviews complete the table of contents of the first number. Students of childhood, and more particularly those interested in the study of defective children, will be glad to learn of the existence of this new French monthly. Will S. Monroe.

*An Introduction to the Study of Literature.* Edited by Edwin Herbert Lewis, Ph. D. The Macmillan Company, New York, 1899, pp. 410.

This Introduction of Dr. Lewis's is a tentative contribution towards the ripe problem of literature teaching in the secondary school.

It is hardly an exaggeration to say that the most of such teaching fails of hitting any mark, and is even worse than useless—positively deleterious—in many instances. The testimony of many careful observers forms a consensus that imagination and the æsthetic and moral sentiments are but little touched and vitalized by the current teaching of the subject. A hint of the reason for this may be gathered from the published statement, in the catalogue of a good secondary school,

that the "purpose of the course" in English Literature is "to acquaint the pupil with the best in English Literature and why it is best." The paralyzing falseness of this motive in literature teaching needs no comment.

Dr. Lewis's book starts with the opposite motive to stimulate and educate the emotions and indirectly the will, for it is evident that the wholesome direction of the affective life is a well disciplined, second only to sound motor training in the first years of life. The significance of Dr. Lewis's book is that it starts from the psychological point of view, from the point of view of the psychology of the period for which the teaching is intended—the psychology of adolescence. As our knowledge of this psychology is sufficiently limited, it is to be presumed that the work of Dr. Lewis is by no means final.

The selections are arranged not in chronological order, but under titles specifying forms of conduct. These are The Nobility of Animals, The Heroism of War, The Heroism of Peace, The Athlete, The Adventurer, The Hearth, The Morning Landscape, The Gentleman, Wit and Humor, and The Far Goal. These all are near the adolescent mind. Each of these chapters is prefaced by a brief introductory essay. The selections are both prose and verse, and cover the field of English Literature from Spenser to Kipling. It would be extravagant to say that better selections could not have been made, but they are admirable. A chronological table of contents is inserted as appendix. It may be questioned whether the critical notes and queries interspersed through the book would not have better been omitted. If they are necessary for the teacher, they might be issued separately as a key.

The book ought to be a boon to that increasingly large class of teachers who feel the futility of the old methods, but have not found any firm ground for the new. W. S. SMALL.

*L'Enfant et l'Adolescent dans la Société Moderne*, par LOUIS DEFERT. Preface de M. TH. RANSSEL. Paris, Montgredien et Cie, 1897. pp. 217.

The pressing problem of the depopulation of France is responsible for this book. The author does not attempt to solve the problem—"to enumerate and define the causes of this evil"—but merely to exploit one of the causes. This cause is the condition of physical and moral inferiority in which many children are placed. Such unfortunate children are of three classes: those who are left to themselves through lack of oversight on the part of careless parents; those who are abandoned, the parents having disappeared; those who suffer ill-treatment at the hands of parents or concubines. Such children are almost sure to fall into idleness and crime. Maturity finds them quite unfit for family life. They become parasites—idlers—not obeying the primal law of labor, and their increase is a menace to society.

In order that the problem of alleviating the condition of these classes of children may be met more intelligently, M. Defert sets himself the task of making known succinctly what the status is of the child and the adolescent in modern society.

He passes in review and cites briefly the purviews which govern childhood and adolescence. The knowledge of these laws, thus readily accessible, will be of great value to all who are engaged in philanthropic work which touches childhood. W. S. SMALL.

*Une enquête pédagogique dans les écoles primaires de Lyon.* Par M. CHABOT. *Bulletin de l'Instruction primaire du Rhône.* January, 1899. pp. 51-55.

That there is an awakened interest in the child study movement in

France is clearly apparent from the prominence given the subject in French pedagogical reviews. The study made in the schools of Lyons by M. Chabot, of the department of education in the University of Lyons, was undertaken at the suggestion of M. Compayré. The pupils tested were asked to state the school study they liked the best, with the following results: Morals, 210; History, 187; Arithmetic, 155; Geography, 145; French, 121. The preference for morals, M. Chabot thinks due to the interest developed through the use of stories, poems, and fine bits of prose. One young French Miss expresses her preference for morals in the following words: "I like the study of morals best because it teaches me how to become the kind of a girl that will bring happiness to her family, become an excellent mother that will teach her children integrity, economy, industry, and many other virtues. Without the good lessons in morals which our teacher gives, France, so thriving, would lapse into anarchy." The express dislike for French M. Chabot thinks largely due to the difficulties of the study. In spite of the numerous efforts to put grammatical rules in the background in the study of the language and literature of the mother tongue, the fact, nevertheless, remains that the study of French is less interesting to the elementary school children than all the other studies, and largely because it is so difficult. Sex differences are less pronounced than one might have expected; and one notes less spontaneity in the answers of these French children than would be found among American children of corresponding ages. The study M. Chabot considers suggestive, in that it hints at lines of interest which must be reckoned within the adjustment of school courses.

WILL S. MONROE.

*Women and Economics*, by CHARLOTTE PERKINS STETSON. Boston, 1898. pp. 340.

It is interesting to note the extreme difference of standpoint between this book and the one of a similar title by Mme. Lampérière. According to our author women have no true economic relation to society, since, while they may drudge in the household or enjoy the luxury of the rich, they are not paid in proportion to the amount or value of their services. In spite of some exceptions, women, as a whole, are dependent upon men for support; and in requital for this set themselves simply to please men. It is not the most worthy, but the most pleasing women who make the most satisfactory alliances and who gain the most constant and devoted support.

As a result of this women have become over-sexed; *i. e.*, lost the power of self support, developed extreme characteristics different from those of men because they are pleasing to men, and invite over-indulgence which weakens the individual and the race.

While the writer lacks in the accuracy of various scientific details, the arguments are supported by a broad range of observation, and every chapter rings with an almost passionate enthusiasm for the central ideas. Naturally counter arguments, *e. g.*, the value of woman as a conservative element, and the advantage of half the race being relieved from economic responsibility are not duly emphasized.

J. P. HYLAN.

*Talks to Teachers on Psychology: and to Students on Some of Life's Ideals*, by WILLIAM JAMES. Henry Holt & Co., New York, 1899. pp. 301.

These fifteen discourses offer little that is new to those who are familiar with the author's psychology, some parts of which are closely followed and simplified. This is especially the case with the chapters on the stream of consciousness, habit, interest, attention, memory,

apperception and will. The three talks to students, which make up the last third of the work, are fresh and interesting.

*Psychology and Life*, by HUGO MUNSTERBERG. Houghton, Mifflin & Co., Boston and New York, 1899. pp. 286.

Like his colleague, Professor James, Professor Münsterberg here presents in the form of popular lectures, dedicated to Professor Rickert of Freiburg, his views upon the six topics of psychology and life; psychology and physiology; psychology and education; psychology and art; psychology and history; psychology and mysticism. Some will perhaps first turn to his discussion of the value of psychology for the teacher and for pedagogy, and will be pleased to know that on the whole he now estimates the study of the child far more highly than his earlier utterances on the subject had given reason to believe; and after reading his estimate of the very slight value of psychology for education, will realize that this is quite correct in the epistemological way in which he conceives psychology. This, however, leaves totally unaffected more anthropological, empirical, practical, and, as we think, larger conceptions of the science.

*From Comte to Benjamin Kidd*, by ROBERT MACKINTOSH. The Macmillan Co., New York, 1899. pp. 312.

This book originated in two years consecutive work with the senior class in sociology of Lancashire College. The author finds Comte, on whom he has an excellent discussion, arbitrary, and thinks that idealism will give a better doctrine of evolution than has yet been taught; that differentiation has been far better than progress in the past; that the latter is due to reason, and holds Christianity and morality the chief safeguards of modern civilization.

*From the Child's Standpoint*, by FLORENCE H. WINTERBURN. Baker & Taylor Co., New York, 1899. pp. 278.

The author of Nursery Ethics here brings together thirty-nine brief papers from popular journals, which present interesting phases of child life written from the standpoint of sympathy rather than of science, which she disparages. There is no indication that we have observed, save a single reference to Preyer and one or two others, that the author knows anything about modern child study.

*Der Stoffwechsel des Kindes*, von WILHELM CAMERER. Tübingen, 1896. pp. 160.

The author treats in the first chapter the growth of children during the first year. In the second, the metabolism of the first fourteen days, then to the twenty-second week, and thence to the end of the first and the second year. In the final chapter, the mechanical theory of metabolism is discussed; and the influence of seasons, time of day, individuality and chance. It is a painstaking, scientific work, with many tables.

*Tom Tit Tot*, by EDWARD CLODD. London, 1898. pp. 249.

This is an essay on savage philosophy in folk-tale and the title is that of the first story. The other topics are on the diffusion of stories. the gullible devils, superstitions about iron, woman as spinster and farmer, barbaric ideas about the power of names, magic through hair, nails, saliva, portraits, shadows, names, etc. The subjects best treated are taboo and words of power, including mantraps, passwords, spells, charms, and the identity of name and soul.

*The Story of Ab; A Tale of the Time of the Cave Man*, by STANLEY WATERLOO. Chicago and New York, 1899. pp. 351.

These 30 chapters, with 11 full page illustrations, are romantic de-

scriptions of the life of primitive cave man. The author has been aided by experts in prehistoric anthropology, and from these he differs only in ignoring the chasm which is supposed to divide paleolithic from neolithic man. There are fights with cave bear, hyena, mammoth, saber-toothed rhinoceros and wolves; stories of courtship, marriage, childhood, prodigies of swimming and tree climbing, murder and other forms of death, burial, romance of fire, etc. The primitive man described has some use of language, uses the bow and arrow, stone axe and knives, and is far more humanized than the missing link which Gabriel Max has painted for us.

*Legends of the Saints*, by G. R. WOODWARD. London, 1898. pp. 104.

This is an attractive little work which attempts to give the stories of an even dozen saints in poetic form. They are Saints Christopher, Joyce, Austin, Ursula, Nicholas, Lawrence, Martin, the two Georges, Eric, John, and Dorothy. The rest of the book is made up of religious poems mostly translated from the Latin and German.

*A Country Schoolmaster; James Shaw, Tynron, Dumfriesshire.* Edited by ROBERT WALLACE. Oliver and Boyd, Edinburgh, 1899. pp. 392.

James Shaw was a Scotch teacher with a large mind and heart, who played his life drama on a small and dimly lighted stage, and lately died at the age of over seventy. He was a man of charming personality, an excellent conversationalist, who dabbled a good deal in science and wrote considerable pretty good poetry, read and commented in racy essays on many current topics, wrote charming letters, knew great men, and led in many ways an ideal life. The book is full of interest and should be in pedagogical libraries.

*Creative Myths of Primitive America in Relation to the Religious History and Mental Development of Mankind*, by JEREMIAH CURTIN. Little, Brown and Co., Boston, 1898. pp. 530.

This fascinating work consists of twenty-two stories, many of which were collected under the auspices of Major Powell, in which American aborigines have sought to give a more or less detailed account of the world and things in it. Most describe an earlier order of existence and method of conduct on which life was patented, and this had two stages, one of harmony and one of conflict, and everything but man is the outcome of this period. He stands apart, alone. In all these stories, there is no reference to white man or to any other race than the Indian. The animal names, which designate nearly all the chief actors, add greatly to the mystery and interest of this book. Convenient notes and etymologies conclude the volume.

*The Art of Teaching*, by DAVID SALMON. Longmans, Green and Co., New York, 1898. pp. 289.

This little manual is extremely practical and comprehensive. It includes the general principles of teaching, questions, object lessons, with a section on each of the main school topics, Fröbelism and sample examination papers. The author has also written seven other text books on grammar, object lesson, composition, history, etc. If a teacher knew nothing of methods, and could have but one book, this is the best I know of its size.

*The Life of Henry Drummond*, by GEORGE ADAM SMITH. London, 1899. pp. 506.

Professor Drummond is very fortunate in his biographer who has made this work eminently one of love, and every one will rise from its perusal with an inspiring ideal of a devoted life. The three chapters

of diaries of travel, and those upon the student movement and American colleges, are of especial educational interest.

*Émile Zola*, by ÉDOUARD TOULOUSE. Paris, 1896. pp. 285.

This remarkable work is an attempt to apply the methods of historical and direct observation to an eminent man. Each sensation, his power of attention, reaction time, assimilation, ideation, association, judgment, emotiveness, will, memory in different directions, power of speech, condition of all his organs, his heredity, the physical peculiarities and measurements, his general biography and many other points, are discussed at great length, and in a very interesting and suggestive way, which suggests how far behind in completeness all preceding biographical work has been.

*The Great Affirmations of Religion*, by THOMAS R. SLICER. Houghton, Mifflin & Co., Boston and New York, 1898. pp. 273.

Mr. Slicer sub-titles his work an introduction to real religion not for beginners but for beginners again. It is made up of sixteen sermons by a Unitarian divine of New York City, which altogether constitute an admirable exposition of a creed based on the higher criticism from which it has extracted abundant practical applications.

*Have You a Strong Will?* by CHARLES G. LELAND. George Redway, London, 1899. pp. 235.

This is Hans Breitmann, who here undertakes to tell us how to develop will power or any other attribute of mind by the easy process of self-hypnotism. He thinks all mental faculties can now be influenced in what we have before regarded in a miraculous way, and even sets forth a new "art of memory." Absolute self-control can thus be taught, and what is better yet an equable or calm state of mind under whatever provocations of grief or mortification. Best of all a kind of fascination by which others are charmed may also be measurably developed.

*Early Chapters in Science*, by MRS. W. AWDRY. J. Murray, London, 1899. pp. 348.

This is intended as a first book of botany, natural history, physiology, chemistry, etc., for young people, and is one of the best introductions to science that has appeared in recent years. It contains illustrations on nearly every page, and these appear to be well chosen and are often rudely executed to incite drawing. The first part teaches to observe and the second to question nature, and the whole is apparently suggested by Burt's popular First Year in Scientific Knowledge, although this is said by the editor to be less like pemmican for the youthful mind.

*L'Ignorance et l'Irréflexion*, par L. GÉRARD-VARET. F. Alcan, Paris, 1898. pp. 296.

This essay on objective psychology is the third we have received recently on the theme of ignorance. The author describes it as due to mental passivity and as really an invention. The relations of ignorance to experience and intelligence, and particularly its relation to the will, are dwelt upon. Its effects on thought and action are most fully discussed.

*Der Alkoholismus*, von ALFRED GROTJAHN. Leipzig, 1898. pp. 412.

This is a timely work on the effects of alcohol upon circulation, nutrition, psychic action, the suggestion of intoxication cures, causes, extent, forms in different lands, and the method of cure, including legislation. It is a practical and concrete study of real value.

*Die Spiele der Menschen*, von KARL GROOS. Jena, 1899. pp. 538.

This work has for sometime been awaited with an interest which will not be disappointed. The playing activities of the different senses, of the motor and then the higher psychic faculties, are treated including experiments with intellect, feeling and will; and in the second part, the play activities of lower impulses are discussed, as plays of fighting, love, imitation and social functions. The theory of play is treated from the five standpoints of physiology, biology, psychology, æsthetics, sociology and pedagogy.

*Popular Education in England*, by J. GEORGE HODGINS. Toronto, 1899. pp. 77.

The author is librarian of the educational department of Ontario, and has given us an admirable digest of the school system since the legislation of 1870, including the qualifications of teachers, new departures, defects, industrial training, university extension, etc.

*Psychologisches Lesebuch zusammengestellt mit Rücksicht auf pädagogische Verwertung*, von S. HOFFMANN. E. Wunderlich, Leipzig, 1896. pp. 167.

We have here a text book in psychology composed in a unique fashion, each topic being treated by a chapter from some well-known psychologist or pedagogue. Sigismund traces development of language from the first word to the first sentence. Formal education is extracted from Waitz, interest from Kearn and Steinthal, the sequence of concepts from Mequel, and so on for twenty-one chapters.

*Special Method in Natural Science*, by CHARLES A. MCMURRY and MRS. LIDA B. MCMURRY. Bloomington, Ill., 1899. pp. 267.

This makes the fourth of Dr. and Mrs. McMurry's special methods in school subjects, the others being on literature, history, reading and geography. Much more than half the book is given up to illustrative results for primary grades. Like all the work of Dr. McMurry, this is done with care and painstaking zeal.

*Through Nature to God*, by JOHN FISKE. Houghton, Mifflin and Co., Boston, 1899. pp. 194.

This is a collection of thirty-two brief and somewhat miscellaneous papers, which are grouped under three separate heads: the mysteries of evil, the cosmic roots of love and self-sacrifice, the everlasting reality of religion.

*L'Éducation Nouvelle*, par EDMOND DEMOLINS. Paris. pp. 320.

"This is not a book, it is an act. We are trying to create in France a new type of school more appropriate to the exigencies of actual life. This school will open in an old but reconstructed chateau in October, 1899." It seems to be inspired by and to some extent modeled after the English school of Abbotsholme and Bedales. It is situated like it, in the beautiful country of Normandy, three kilometers from the nearest station, and its end "is to make men as rapidly as possible, morally, intellectually and physically." Children are not received under eight years of age or above fifteen. Work in the garden, in the field, visiting farms, factories, and predominantly scientific and modern courses of study characterize all of these schools.

*Les Français d'aujourd'hui*, par EDMOND DEMOLINS. Paris. pp. 465.

This is a very frank characterization of his native land by this brilliant author, and is dedicated to Le Play. It is devoted to the characterization of the social types in the south and center and has had a great sale. The various zones characterized are pastoral, the fruit pro-

ducing, the zone of little farms and that of great ones, and that which tends toward communism of land.

*A Study of the Kindergarten*, by FREDERIC BURK and CAROLINE FREAR BURK. San Francisco, 1899. pp. 123.

This co-operative study, dedicated to Dr. G. Stanley Hall, was carried out during the past school year by Dr. Burk with the co-operation of a number of his teachers. Some of the topics treated are: The neurological conditions of the kindergarten child; its physical culture; play, language, music; love of nature; counting and number; moral training; spontaneous choice and use of kindergarten material. Most of the articles are brief and their value is mainly suggestive. The pamphlet, however, is exceedingly appetizing and stimulating, and is recommended to the careful attention of all interested.

*The Pedagogues*, by ARTHUR STANWOOD PIER. Small, Maynard & Co., Boston, 1899. pp. 287.

This is rather a light story of the Harvard Summer School, which soon becomes a love story with a happy dénouement.

*L'Enfant*, par COMTESSE NACLA. E. Flammarion, Paris, 1899. pp. 203.

This little compend is a collection of interesting and rather lively papers on education in the cradle, æsthetic, moral, physical and sentimental education, with one chapter on physical and another on moral defects.

*Autobiography of a Child*. Wm. Blackwood & Sons, London, 1899. pp. 299.

This anonymously printed book, said to have been written by Hannah Lynch, appears to be a probable and truthful record of her own or some one's life during childhood, starting with the earliest reminiscences and proceeding toward maturity, but the author has elsewhere stated that it is a purely imaginative sketch. It is at any rate marked by a high degree of verisimilitude and is written in a sprightly and interesting style, and might be regarded as a human document or a return of some value on several child study topics.